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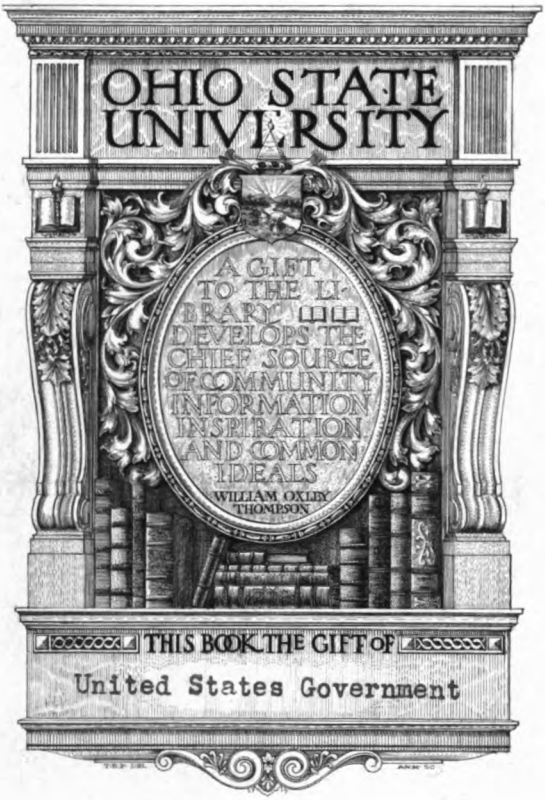
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U.S. Tariff Commission
Report
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UNITED STATES TARIFF COMMISSION

CRUDE PHOSPHATES

AND

SUPERPHOSPHATE

REPORT TO THE CONGRESS IN RESPONSE TO SENATE RESOLUTION 298, SEVENTY-SECOND CONGRESS, UNDER THE GENERAL PROVISIONS OF SECTION 332, PART II, TITLE III, OF THE TARIFF ACT OF 1930

REPORT No. 100

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LETTER OF TRANSMITTAL

UNITED STATES TARIFF COMMISSION,
Washington, June 3, 1935.

SIR: In compliance with Senate Resolution No. 298, Seventy-second Congress, directing the Tariff Commission to make an investigation with respect to phosphates, crude, and superphosphate, I have the honor to transmit the report herewith.

Respectfully,

ROBERT L. O'BRIEN, *Chairman.*

THE PRESIDENT OF THE SENATE,
Washington, D. C.

586929

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REPORT TO THE CONGRESS ON CRUDE PHOSPHATES AND SUPERPHOSPHATE

PART I. INTRODUCTION AND SUMMARY

The investigation of phosphates, crude, and superphosphate, under the general powers of the United States Tariff Commission, as provided for in section 332 of the Tariff Act of 1930, was instituted pursuant to Senate Resolution 298, dated December 8, 1932 (72d Cong., 2d. sess.). This resolution specified that the investigation be conducted under section 336 of the Tariff Act of 1930, but inasmuch as section 336 (g) expressly prohibits the transfer of an article from the free list to the dutiable list, and since both crude phosphates (par. 1740) and superphosphate (par. 1685) are duty-free, the Commission instituted the investigation under the general investigatory powers (sec. 332).

In the conduct of this investigation, the Commission has not obtained costs of production from domestic and foreign producers. With unsettled conditions in the currencies of the United States and of many foreign countries trading in crude phosphates and superphosphate, costs obtained for the present period or for a prior period would not furnish a reliable measure of any differences in costs of production of these commodities in the United States and in the principal competing country or countries for any future tariff consideration of these commodities by the Congress.

After reasonable public notice, a public hearing was held on September 12, 1933, at the offices of the Commission in Washington. At this hearing, interested parties were given opportunity to be present, to produce evidence, and to be heard. The testimony of the only witness to appear dealt largely with alleged dumping of superphosphate by Japanese and certain other producers, a matter over which the Commission has no jurisdiction. He represented only western manufacturers of superphosphate, who make less than 5 percent of the total domestic output. Eastern and central producers, making more than 95 percent of the total, did not appear at the hearing.

Crude Phosphates

Crude phosphates appear chiefly as phosphate rock, but to some extent as apatite, a phosphate material differing from phosphate rock principally in physical form.

The United States production of crude phosphates is larger than that of any other country and accounts for approximately one-third of the total world output. The bulk of the foreign production is in various French possessions and protectorates, principally in North Africa; Tunisia ranks first, followed by French Morocco and Algeria; next after these possessions and protectorates are Nauru and Ocean Islands in the Pacific. The Soviet Union is a large potential pro-

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ducer of apatite, a crude phosphatic material; at present the output is relatively small, but is expected to increase rapidly.

Imports of crude phosphates have at all times been very small in comparison with domestic production. At their peak in 1928 and 1929, they were equal to about 1 percent of the domestic output and came largely from French Morocco. As the result of antidumping proceedings, imports from that country ceased after 1930. Although domestic production has fallen sharply since 1930, importation in 1932 and 1933 was equal to less than half of 1 percent of the output in this country. Most of the recent imports have been from the French possessions in the Pacific and have entered the customs district of Hawaii for local use.

The importation of concentrated apatite from the Soviet Union has been made the subject of an investigation by the Tariff Commission under the provisions of section 337 of the Tariff Act of 1930, domestic producers complaining of unfair competition through the unauthorized use of United States patents in concentrating the apatite, and selling the product so concentrated in the United States. The Tariff Commission found unfair methods of competition and unfair acts in the importation and sale of such commodity. On appeal, the Court of Customs and Patent Appeals, on February 25, 1935, reversed the findings of the Commission on the ground that such importation and sale do not constitute unfair methods of competition or unfair acts within the meaning of section 337.

Exports of phosphate rock from the United States are large, representing on the average about one-fourth of the production. However, they have fallen materially since 1930 as the result of competition of the North African and Russian phosphates in the European markets. They are widely distributed, going principally to numerous European countries, to Canada, and to Japan. In recent years Japan has taken more than has any other country.

Superphosphate

Superphosphate is derived from crude phosphatic material by chemical treatment which renders the component phosphate material available for plant food. The United States leads in its production, followed in 1930, in the order named, by France, Italy, Spain, Germany, Australia, and Japan. Japan may at present rank somewhat higher.

Imports of superphosphate have at all times been small in comparison with total domestic production, which in recent years has ranged from less than 2,000,000 to almost 5,000,000 short tons annually. In the second half of 1931, when first separately recorded, imports amounted to 5,977 short tons; they mounted in 1932 to 24,507 tons, and in 1933 to 26,549 tons; the rate of importation in 1934 has been considerably lower, 18,265 tons. In both 1932 and 1933 imports equaled about 1 percent of domestic production. Exports, however, have been of more consequence; they averaged about 105,000 tons annually in the 5-year period 1927 to 1931; they were 26,749 tons in 1932; 39,616 tons in 1933, and 66,248 tons in 1934.

Imports of superphosphate have come in recent years principally from Japan, and the testimony at the public hearing indicates that domestic producers are concerned chiefly with the Japanese competition, which is confined to the Pacific coast. In that area, imports from Japan have represented a large proportion of total consumption in

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the last few years. A large part of domestic production of superphosphate and of phosphate rock is in the South Atlantic States. Producers in these States, however, ship no superphosphate to the Pacific coast, which is supplied entirely by imports, and by four domestic producers. The largest of these domestic suppliers is the Anaconda Copper Co., with a plant in Montana, but its production of superphosphate is a very small fraction of its total business. The other three of these suppliers are small plants in California, not all of which have been in continuous operation.

Imports from Japan into the United States, most of which entered the Pacific coast ports and was consumed in coastal States, amounted to 15,546 tons in 1932, 13,612 tons in 1933, and 10,486 tons in 1934. The total sales of treble superphosphate by the Anaconda Copper Co., the larger part of which went to Pacific coast States, as publicly stated, amounted to 14,144 tons in 1932. The sales of the three producers in California are much smaller. Since the greater part of the imports consists of standard grade, containing much less net phosphate material than the treble grade, the ratio between the figures for domestic sales of the Anaconda Copper Co. and the figures for imports exaggerates considerably the importance of the imports.

Cost data published by the Anaconda Copper Co., not verified by the Commission, indicate costs per unit of phosphate content decidedly higher than the c. i. f. value of imports of Japanese superphosphate. On the other hand, the c. i. f. price of the Japanese product at Pacific coast points is considerably higher than the quoted price of superphosphate in eastern producing centers.

Domestic exports of phosphate rock to Japan, originating on the east coast of the United States, greatly exceed in quantity and value imports of superphosphate from Japan, almost entirely into western United States. The value of the exports to Japan of phosphate rock in 1933 was $485,527 and that of the imports of superphosphate, $158,126.

Japan has only small deposits of phosphate rock and obtains its supplies mainly from the United States, Egypt, French Oceania, and Makatea Island. Japan has no natural advantage that would seem to indicate any great future development of the superphosphate industry.

PART II. CRUDE PHOSPHATES

Description and Uses

As used in this report, the term "phosphates, crude" relates to the various forms of mineral phosphates mined primarily for use in the production of superphosphate and certain other phosphatic chemicals.

Crude phosphates are nonmetallic minerals, composed of calcium phosphate in combination with various other substances and mixed with certain amounts of gangue materials. At the present time in the United States, phosphate rock is mined in the following forms: (1) Florida land pebble, constituting about 80 percent of the aggregate domestic output; (2) Florida hard rock, comprising about 0.8 percent of domestic production; (3) Tennessee brown rock and Tennessee blue rock, about 14 percent of the total; and (4) western (Idaho, Montana, and Wyoming) rock, about 5 percent of the aggregate. Phosphate rock is sold in several grades, according to tricalcium phosphate content.

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Phosphorus is one of three essential plant foods. As it occurs in the crude rock, phosphorus is not readily assimilated by plants. Consequently, by chemical treatment, this crude rock is converted into superphosphate, which furnishes a readily available form of phosphorus. As indicated by table 1 about 90 percent of the total domestic consumption is thus converted; the remaining 10 percent is used as a raw material for the production of industrial phosphatic chemicals, as a filler for fertilizer, in proprietary stock feeds and medicines, and in direct application to the soil.

TABLE 1.—*Phosphates, crude: Estimated consumption by principal uses in the United States and its possessions*

[Long tons]

Year	Total consumed in United States and possessions	Consumed in manufacture of superphosphate	Consumed in manufacture of chemicals, etc.	Consumed in direct application to soil
1870	54,109	53,369	540	200
1880	168,702	166,102	2,500	100
1890	323,191	314,991	6,500	1,700
1900	1,008,307	970,107	30,200	8,000
1910	1,593,657	1,493,957	79,700	20,000
1920	3,034,333	2,779,432	182,100	72,801
1921	1,334,248	1,227,345	93,400	13,503
1922	1,704,479	1,537,583	150,867	16,029
1923	2,185,880	1,932,110	243,222	10,548
1924	2,065,114	1,903,319	147,475	14,320
1925	2,614,354	2,419,994	162,361	31,999
1926	2,478,391	2,268,275	180,214	29,902
1927	2,280,683	1,998,044	249,682	32,957
1928	2,648,454	2,380,791	225,518	42,145
1929	2,663,008	2,262,239	339,545	61,224
1930	2,733,328	2,367,787	323,948	41,593
1931 [1]	1,597,150	1,383,550	189,300	24,300

[1] No later data are available.

Source: Mineral Resources of the United States, U. S. Bureau of Mines.

Production in the United States

In the Unitd States, phosphate rock is mined by various methods, according to the nature of the deposits. For Florida land pebble, hydraulic methods are used; Florida hard rock is dredged; Tennessee brown rock is obtained by drag-line methods; and Tennessee blue rock and western rock are recovered by underground mining.

With the exception of Tennessee blue rock and western rock, all crude phosphates mined in the United States contain so much gangue material (sand, clay, etc.) that they are not commercially marketable as mined. To increase the phosphate content by removal of the gangue, they are subjected to a process of washing and screening. In this process the fine phosphate particles, comprising about 50 percent of the total phosphate content, are lost along with the sand and clay in gangue.

In recent years about 25 companies mined phosphate rock in the States heretofore mentioned. A number of the larger operators work deposits in more than one State.

The production of phosphate rock in the United States exceeds that of any other single country. It is, however, less than the aggregate mined in the French possessions and protectorates.

Table 2 shows the marketed production of phosphate rock in the United States by principal producing areas.

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TABLE 2.—*Phosphates, crude: Marketed production in the United States by principal producing areas*

[In thousands]

Year	United States, total		Florida		Tennessee		Western States (Idaho, Montana, Wyoming)		All other	
	Long tons	Value	Long tons	Value	Long tons	Value	Long tons	Value	Long tons	Value
1900	1,491	$5,359	706	$2,983	454	$1,329	----------	----------	330	$1,047
1910	2,655	10,917	2,068	8,648	393	1,481	10	$33	185	755
1920	4,104	25,060	3,369	19,464	621	4,857	56	304	58	454
1921	2,064	12,270	1,780	10,432	264	1,721	6	26	14	92
1922	2,418	10,483	2,059	8,348	339	2,003	4	20	16	112
1923	3,007	11,576	2,548	9,060	416	2,255	30	176	13	86
1924	2,868	10,252	2,433	8,017	389	1,976	39	195	8	64
1925	3,482	11,546	2,930	8,789	464	2,335	73	319	15	102
1926	3,210	10,894	2,708	8,684	455	1,981	38	162	9	68
1927	3,171	11,253	2,637	8,646	482	2,319	52	288	--------	--------
1928	3,501	12,443	2,883	9,424	577	2,857	41	162	--------	--------
1929	3,761	13,153	3,088	9,901	634	3,097	39	155	--------	--------
1930	3,926	13,997	3,248	10,790	611	2,939	67	268	--------	--------
1931	2,535	9,288	2,061	7,202	344	1,546	130	541	--------	--------
1932	1,707	5,738	1,470	4,780	194	776	43	183	--------	--------
1933	2,490	7,872	2,136	6,417	334	1,373	20	82	--------	--------
1934 [1]	2,876	10,039	2,411	8,048	428	1,839	36	152	--------	--------

[1] Preliminary.

Source: U. S. Bureau of Mines publications.

Domestic reserves.—The United States has ample reserves of phosphates, which, at the present rate of consumption of 2 to 3 million tons annually, will last for an indefinite period. The immense deposits in the West are of interest as a potential source of supply. At present they supply a very small part of domestic consumption, because of their distance from principal markets, and because they are more costly to mine than phosphate occurring in Florida and Tennessee.

Table 3 shows the estimated reserves of phosphate rock in the United States as of December 31, 1930.

TABLE 3.—*Phosphates, crude: Estimated reserves in the United States as of Dec. 31, 1930, on the basis of a content of 55 percent or more of tricalcium phosphate*

Source	Estimated reserves (long tons)	Source	Estimated reserves (long tons)
Florida	277,000,000	Western States—Continued.	
South Carolina	9,000,000	Utah	327,000,000
Tennessee	93,000,000	Wyoming	115,000,000
Western States:		Arkansas	20,000,000
Idaho	4,997,000,000	Kentucky	1,000,000
Montana	391,000,000	Total	6,231,000,000

In addition to the above, deposits for which no estimates are available are known to exist in Alabama, North Carolina, Pennsylvania, and other States.

Flotation.—The commercial development in the United States, in recent years, of flotation as a method of concentrating crude phosphate ores promises to extend greatly the estimated duration of the deposits

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in Florida and Tennessee and to cause a substantial lowering of costs of production. This process is covered by patents controlled by a corporation in the United States. By it are recovered the fine particles of phosphate, constituting about 50 percent of the total phosphate content, which are otherwise lost in the washing process of concentration. Prior to the late nineteen twenties, this development was mostly in the experimental stage; at present it is estimated that about 15 percent of the total domestic output of phosphates is concentrated by flotation.

The only foreign country using flotation in concentrating phosphatic ores is the Soviet Union. Apatite occurring in that country is of such a physical nature that it cannot be concentrated by the usual methods of screening and washing, and hand sorting. In other foreign countries phosphates are concentrated by the usual methods, when not sufficiently pure to be used as mined.

Foreign Production

Crude phosphates are extensively distributed throughout the world. The principal foreign production is in the French possessions, particularly in North African protectorates, but there is a growing production in the Soviet Union. Deposits in French North Africa were either discovered or developed as follows: Algeria, 1895; Tunisia, 1897; and Morocco, 1917. Deposits in Algeria and Tunisia are mined by underground methods; those in Morocco are near the surface. Rock from none of these deposits requires extensive concentrating before marketing. The development of these deposits, especially those in Morocco, has adversely affected American export trade. Development of the extensive apatite reserves in the Soviet Union was commenced about 1930. Compared with the United States and with French protectorates, the present Soviet Union output is not large. It is steadily increasing, however, and is becoming a factor of considerable importance in world trade in phosphates. The output in the Soviet Union is reported to have been 276,000 tons in 1933.

Since 1913 the world production of phosphate rock has varied from 3½ million to more than 10 million tons. The output of the chief foreign producing countries in 1929, 1930, and 1932 is shown in table 4. Japan produces practically no crude phosphate.

TABLE 4.—*Phosphates, crude: Production by principal foreign producers*

[Long tons]

Country	1929	1930	1932
French possessions and protectorates:			
Tunisia	2,471,326	3,273,449	1,644,440
Morocco [1]	1,582,839	1,750,900	967,571
Algeria	735,232	833,308	558,180
Makatea Island	239,151	173,293	118,237
France	186,014	(2)	(2)
Nauru and Ocean Islands [3]	576,588	501,171	429,697
Egypt	211,909	308,525	342,784
Christmas Island [4]	117,864	119,933	83,837
Dutch West Indies: Curaçao [4]	101,657	86,115	64,009
Soviet Union	(5)	(5)	[5] 250,000

[1] Shipments including exports.
[2] Not available.
[3] Exports, fiscal year ending June 30.
[4] Exports.
[5] Estimated output of apatite. In addition, unknown quantities of crude phosphates are produced.

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United States Imports

Since the early part of the present century, imports of phosphate rock have been small in comparison with domestic production. None of the important producers of superphosphate, with the exception of the United States and the Soviet Union, produce their own raw material. There was an abrupt increase in imports in the period 1927 to 1930, largely because of imports from French Morocco, and in 1928 and 1929 imports equaled a little more than 1 percent of domestic production. Antidumping proceedings have been a factor in preventing the importation of any rock from Morocco since 1930. Since 1929 imports each year have equaled less than 1 percent of domestic production; in 1931 less than one-half of 1 percent of domestic production and less than 2 percent of domestic exports.

Imports for consumption.—Table 5 shows imports of phosphate rock entered for consumption in the United States, 1900 to 1934.

TABLE 5.—*Phosphates, crude: Imports for consumption in the United States*

Year	Quantity	Value	Unit value	Year	Quantity	Value	Unit value
	Long tons				*Long tons*		
1900	137,086	$791,189	$5.77	1927	28,195	$292,871	$10.39
1910	21,706	235,040	10.83	1928	45,812	431,238	9.41
1920	63	2,090	33.17	1929	44,899	469,171	10.45
1921	3,535	43,960	12.44	1930	32,658	377,177	11.24
1922	5,890	95,846	16.27	1931	13,496	162,517	12.04
1923	6,725	92,263	13.72	1932 [1]	6,375	70,039	10.99
1924	16,098	181,515	11.28	1933	7,725	72,597	9.40
1925	2,735	37,932	13.87	1934	None	None	.....
1926	17,378	192,611	11.08				

[1] Not including apatite; see text below and table 6.

In addition to the imports shown above for 1932, an importation of 6,551 tons [1] of apatite concentrates [2] from the Soviet Union, valued at $23,808, or $3.60 per ton, was made at Baltimore in October 1932. This shipment was the basis of an investigation under section 337 of the Tariff Act of 1930, instituted pursuant to a complaint by domestic producers, charging unfair methods of competition or unfair acts in the importation into and sale in the United States of apatite concentrated by flotation processes covered by patents controlled by domestic interests, who had not authorized the use of these patents in the Soviet Union. The Commission found unfairness under section 337. Appeal from the Commissions' findings, upon question of law, was taken to the Court of Customs and Patent Appeals, which rendered a decision on February 25, 1935, reversing the findings of the Commission.

Imports by countries of origin.—There were no imports of phosphate rock in 1934. In other recent years imports have been so small in relation to domestic production and so irregular as to source that no single country may be said to be the principal source. Table 6 shows imports of phosphate rock by countries of shipment, 1930 to 1933.

[1] The discrepancy between this figure and that shown in table 6 for 1932, amounting to 56 tons, is accounted for by the inclusion of a small shipment, probably a sample, in the quantity reported as entered at New York.

[2] Apatite is a crude phosphate material differing from domestic rock chiefly in physical form. Vast deposits (an entire mountain) have been discovered in the Soviet Union. Very small amounts are sporadically produced in the United States as a byproduct from mining titanium ore in Virginia.

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TABLE 6.—*Prosphates, crude, and apatite:*[1] *Imports for consumption in the United States, by countries of shipment*

Country of shipment	1930		1931		1932		1933	
	Long tons	Value	Long tons	Value	Long tons	Value	Long tons	Value
French Oceania	19,417	$257,742	12,985	$161,219	6,350	$69,879	5,625	$59,409
Cuba	6,360	72,797						
Morocco	6,000	30,000						
Canada	830	16,278						
Soviet Union in Europe	51	360	511	1,298	[2] 6,607	23,808		
Germany					25	160		
Dutch West Indies							2,100	13,188
Total all countries	32,658	377,177	13,496	162,517	12,982	93,847	7,725	72,597

[1] Apatite from Soviet Union in Europe. [2] See footnote 1, p. 7, as to this shipment.

Imports by customs districts.—In recent years, all importations from French Oceania have been entered at Hawaii; those from the Soviet Union, at Baltimore; and those from Dutch West Indies, at Philadelphia.

Principal markets

Superphosphate manufacturing centers in the southeastern States are the principal markets for phosphate rock. Consumption in these States is almost entirely in the manufacture of superphosphate. Baltimore, Md., is the largest single market.

Comparability

Except for slight differences in tricalcium phosphate content, domestic and imported phosphate rock are comparable and usable for the same purposes. Apatite is harder and more crystalline than domestic phosphate rock, but it is similar in composition and suitable for the same uses.

Exports

Except during the World War period, the United States has for years been a large exporter of phosphate rock. The rate of increase of exports has been less since 1922 than during the pre-war period. Since 1923, exports to Europe have been declining, largely because of replacement of American rock in European markets by phosphates from French possessions and protectorates (Morocco, Tunisia, etc.). This decline has been offset by the development of other markets, especially Japan, which is now the principal foreign customer for American phosphate rock. The decline in exports since 1930 has been due largely to shrinkage in demand for superphosphate manufacture. The development of the vast apatite deposits in the U. S. S. R. in Europe probably may further adversely affect exports of American rock to Europe. Exports from Soviet Union have been increasing rapidly.

Table 7 shows total United States exports, 1900 to 1934.

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TABLE 7.—*Phosphates, crude: Exports,*[1] *all grades*

Year	Quantity	Value	Year	Quantity	Value
	Long tons			*Long tons*	
1900	619,995	$5,217,560	1927	918,211	$4,731,562
1910	1,083,037	8,234,276	1928	898,764	4,453,101
1920	1,069,712	10,570,175	1929	1,142,746	5,386,919
1921	733,312	7,320,137	1930	1,225,722	5,630,547
1922	719,294	5,858,167	1931	951,305	4,277,070
1923	827,551	5,772,171	1932	613,035	2,795,654
1924	818,773	5,120,832	1933	829,059	3,544,377
1925	870,200	5,677,763	1934 [2]	993,493	5,008,532
1926	748,963	4,435,590			

[1] Exports consist of varying amounts of rock of different tricalcium phosphate content. To show unit values of the aggregate would be misleading.
[2] Preliminary.

Table 8 shows exports, by grades, to principal countries in 1933. The high-grade hard rock is higher in phosphorus content than the Florida land pebble. Both grades are used principally for the manufacture of superphosphate.

TABLE 8.—*Phosphate rock: Exports, by grades, to principal countries, 1933*

Country of destination	High-grade hard rock		Land pebble		Total	
	Long tons	Value	Long tons	Value	Long tons	Value
Netherlands	2,750	$19,250	153,130	$639,662	155,880	$658,912
Germany	24,840	173,092	130,716	587,678	155,556	760,770
Japan			157,362	485,527	157,362	485,527
Sweden			63,720	299,836	63,720	299,836
Spain			73,178	327,715	73,178	327,715
Italy			87,767	384,690	87,767	384,690
Denmark			28,696	116,453	28,696	116,453
Poland and Danzig	2,700	17,550	20,418	114,450	23,118	132,000
United Kingdom			27,400	108,141	27,400	108,141
Canada	977	7,303	14,210	51,102	15,187	58,405
Latvia			13,144	64,173	13,144	64,173
France			2,750	6,875	2,750	6,875
Belgium			9,764	39,812	9,764	39,812
Czechoslovakia			2,998	14,540	2,998	14,540
Yugoslavia			1,650	8,250	1,650	8,250
Cuba	97	957	62	321	149	1,278
Lithuania	11,000	77,000			11,000	77,000
Total	42,364	295,152	786,965	3,249,225	829,329	3,544,377

Price Quotations

In recent years the price of phosphate rock in the United States has been at about the same level as in the years immediately preceding the World War. Price quotations of the high-grade Florida rock, and lower-grade land pebble, f. o. b. mines, bulk cargo, are shown in tables 9 and 10 for the years 1923 to 1934. No doubt many sales have been made above and below these quotations, which indeed may not be considered as realization prices, but are presented only to indicate the stability of the price structure in the phosphate rock industry.

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TABLE 9.—*Phosphates, crude: Price quotations, high-grade Florida rock, 77 percent*

[Per ton]

Year	January	April	July	October	Year	January	April	July	October
1923	$7.60	$7.60	$7.60	$7.60	1929	$6.50	$6.50	$6.50	$6.50
1924	7.60	6.60	6.60	6.60	1930	6.50	6.50	6.50	6.50
1925	6.00	6.00	6.00	6.00	1931	6.50	6.50	6.50	6.50
1926	6.50	6.50	6.50	6.50	1932	6.50	6.50	6.50	6.50
1927	6.25	6.25	6.25	6.25	1933	6.50	6.50	6.50	5.85
1928	6.50	6.50	6.50	6.50	1934	5.90	5.90	6.35	6.35

Source: Oil, Paint and Drug Reporter.

TABLE 10.—*Phosphates, crude: Price quotations, Florida land pebble, 68 percent minimum*

[Per ton]

Year	January	April	July	October	Year	January	April	July	October
1923	$2.50	$3.00	$3.00	$3.25	1929	$3.10	$3.10	$3.10	$3.10
1924	3.25	2.25	2.25	2.15	1930	3.10	3.10	3.10	3.10
1925	2.10	2.10	2.50	2.65	1931	3.10	3.10	3.10	3.10
1926	2.85	3.25	3.15	3.15	1932	3.10	3.10	3.10	3.10
1927	3.15	3.00	3.00	3.00	1933	3.10	3.10	3.10	2.80
1928	3.00	3.00	3.00	3.10	1934	2.85	2.85	3.25	3.25

Source: Oil, Paint and Drug Reporter.

Competitive Conditions

Imports from countries of greatest capacities are prevented or retarded by action under the antidumping law.

Phosphate rock from French North Africa has replaced considerable American rock in European markets. Apatite from the Soviet Union has also begun to do the same thing. Recently, however, the decline of the dollar in terms of gold has been an aid to American exporters competing with the French. Largely as a result of this dollar devaluation, a sales agreement between American and French exporters has been effected. The terms of the agreement are not known, but it is reported that American exporters are to have a certain percentage of the European market. The Soviet Union is not a party to the agreement.

PART III. SUPERPHOSPHATE

Description and Uses

Superphosphate is a manufactured phosphatic fertilizer material sold as: (1) Standard or ordinary superphosphate, or acid phosphate, usually containing 16 to 20 percent of available phosphoric acid, and (2) double superphosphate, containing from 2½ to 3 times as much available phosphoric acid. This product is referred to by some manufacturers as "treble" or "triple" superphosphate. The sole use of superphosphate is as a fertilizer; to make a complete fertilizer it is usually mixed with other ingredients containing nitrogen and potash. The two grades of superphosphate are used for the same purpose. The treble grade is less bulky and is more economical to transport.

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Production in the United States

Standard superphosphate is made by treating phosphate rock with sufficient sulphuric acid to convert the insoluble tricalcium phosphate to soluble or available calcium acid phosphate. Double or treble superphosphate is made in two stages: (1) Treatment of phosphate rock with sufficient sulphuric acid to form free phosphoric acid, and (2) acidulation of additional phosphate rock with phosphoric acid from the first operation. In both types the acidulated rock is "cured" or aged and ground. The bulk of domestic production is of the standard (16 to 20 percent) type.

Table 11 shows domestic production: The data for 1920 and thereafter are as reported by the Bureau of the Census; those prior to 1920 are estimates based on the consumption of phosphate rock in superphosphate, using the commercial yield of the 16 percent grade. Census figures prior to 1928 are for all grades; those for 1928 and later years are on a 16 percent basis.

TABLE 11.—*Superphosphate: Production in the United States*

[Short tons]

Year	Quantity	Year	Quantity
1870	102,800	1927	[1] 4,086,225
1880	320,000	1928	[2] 4,954,240
1890	606,000	1929	[2] 4,815,663
1900	1,868,000	1930	[2] 4,595,096
1910	2,876,000	1931	[2] 2,744,528
1920	5,351,000	1932	[2] 1,765,971
1921	[1] 3,483,704	1933	[2] 2,694,870
1923	[1] 4,237,537	1934	[2] 2,868,016
1925	[1] 4,096,442		

[1] Biennial Census of Manufactures.
[2] Monthly survey, Bureau of the Census (incomplete reports).

Ordinarily about 60 percent of the production of superphosphate is for sale, mostly to producers of fertilizers who do not manufacture superphosphate; the remainder is consumed by the producers in the manufacture of mixed fertilizers.

The production of superphosphate is concentrated in the South Atlantic States, notably Maryland and Georgia. The relatively small amounts (about 1 percent of the total) made in the West are produced in Montana and California. The output of the treble grade in this section, all by one company, in short tons, was 24,042 in 1931; 10,963 in 1932; and 1,302 in the first 6 months of 1933; the output of the standard grade in the West is also small and intermittent.

More than 100 companies, most of which are primarily if not exclusively fertilizer companies, manufacture superphosphate. About a dozen of the large producers of phosphate rock also manufacture large quantities of superphosphate and mixed fertilizers.

The manufacture of superphosphate is somewhat seasonal, the peak of production being in the winter months in anticipation of heavy spring demand for fertilizers. The low point of production and shipment is in the summer months. A moderate rise in production and consumption occurs in the fall for use in fertilizers for fall crops.

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Production in Foreign Countries

According to the International Yearbook of Agricultural Statistics, Rome, the output of superphosphate by the principal foreign producers in 1931 and 1932 was as shown in table 12.

TABLE 12.—*Superphosphate: World production, in short tons*

Country	1931	1932
United States	[1] 2,743,754	[1] 1,767,162
France	1,657,408	1,464,889
Japan	950,366	1,050,456
Spain	978,411	----------
Italy	883,869	734,601
Germany	560,918	704,178
Australia	739,138	627,842
U. S. S. R. (in Europe and in Asia)	522,665	674,424
Netherlands	544,455	552,182
Great Britain and Northern Ireland	372,855	443,395
Belgium	343,198	335,749
Sweden	241,159	213,092
Denmark	253,460	191,748
Czechoslovakia	139,016	131,946

[1] These figures differ slightly from those shown in table 11, taken from U. S. Census reports.

Except the United States, and probably the Soviet Union, all countries important in the production of superphosphate import from foreign countries all or most of the phosphate rock they consume. France, however, obtains its rock from its North African possessions.

United States Imports

Statistics for imports of superphosphate are not available prior to July 1, 1931. From July 1, 1931, to December 31, 1931, imports for consumption were 5,977 short tons, valued at $80,794. Table 13 shows imports by countries of shipment for 1932, 1933, and 1934.

Imports for 1932, 1933, and 1934 were equal to 1.4, 0.99, and 0.64 percent, respectively, of the domestic production as reported by the Census Bureau.

TABLE 13.—*Superphosphate: Imports by countries of shipment*

Country of shipment	1932		1933		1934[1]	
	Quantity	Value	Quantity	Value	Quantity	Value
	Short tons		*Short tons*		*Short tons*	
Japan	15,546	$172,464	13,612	$158,126	10,496	$131,637
Canada	2,772	54,034	3,919	63,878	6,853	98,420
Cuba	3,360	44,662	----------	----------	----------	----------
Belgium	1,332	28,131	2,841	51,878	157	4,594
Netherlands	1,313	14,623	5,676	35,496	721	10,548
United Kingdom	127	1,159	326	2,081	----------	----------
France	58	771	----------	----------	----------	----------
Italy	----------	----------	11	227	----------	----------
Germany	----------	----------	164	3,631	48	341
Total	24,507	315,844	26,549	315,317	18,265	245,540

[1] Preliminary.

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Imports in different years from the several countries comprise standard and treble superphosphate in varying proportions. The price of the treble grade is 2½ to 3 times that of the standard. Such a condition renders comparison of average of unit values meaningless.

Entries from Cuba go to Puerto Rico; those from Japan to the west coast; those from Canada to the Northwestern and Northeastern States; and those from other countries chiefly to the east coast.

Principal Competing Country

In 1932 and 1933, Japan was the principal competing country.

Principal Markets

The principal markets for domestic superphosphate as a whole are in the fertilizer mixing centers in the South Atlantic States, chiefly Baltimore. West coast points, notably southern California, are the principal markets for both Japanese superphosphate and that of domestic producers in the West. Most of the Canadian material is sold in the Northwest and in Maine. Imports from Cuba go entirely to Puerto Rico and are thought to be either a reexport of American material or manufactured by an American-owned plant in Cuba.

Invoice Analysis

Virtually all imports of superphosphate from Japan are entered through west coast customs districts. The Commission has analyzed invoices of imports of superphosphate from Japan entered through these customs districts. These data are summarized in table 14.

TABLE 14.—*Superphosphate: Imports for consumption from Japan, entered through west coast customs districts*

Percent P_2O_5	1931			1932			1933 (6 months)		
	Short tons	C. i. f. value	Value per ton	Short tons	C. i. f. value	Value per ton	Short tons	C. i. f. value	Value per ton
Standard grade:									
15	137	$1,451	$10.59	100	$722	$7.22			
16	899	9,596	10.67	4,007.5	32,532	8.12	1,500	$13,770	$9.18
17	100	1,218	12.18	100	970	9.70	125	1,350	10.80
18	53.25	720	13.52						
19	50	562	11.24	2,832	26,118	9.22	850	10,432	12.27
Total	1,239.25	13,547	10.93	7,039.50	60,342	8.57	2,475	25,552	10.32
30				.63	13.48	21.40			
Treble grade:									
38				200	4,710	23.55			
39				152.5	2,978	29.78	50	975	19.50
40	131	3,725	28.44	2,415	49,338	20.43	810	15,080	18.62
Total	131	3,725	28.44	2,767.5	57,026	20.61	860	16,055	18.67

These data adjusted to the basis of units of P_2O_5[3] (available phosphoric acid) are shown in table 15.

[3] A unit of available phosphoric acid (P_2O_5) is 1 percent of a ton, or 20 pounds. Each percentage of P_2O_5 in a short ton is one unit. Thus a ton of 18 percent superphosphate contains 18 units of available P_2O_5. The unit is a common basis of sale in the superphosphate industry.

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TABLE 15.—*Superphosphate: Imports for consumption from Japan through west coast customs districts, calculated to the basis of units*[1] *of P_2O_5*

	1931	1932	1933 (6 months)
Standard grade:			
Units P_2O_5	20,047	121,128	42,275
Value	$13,547	$60,342	$25,552
Unit value	$0.68	$0.50	$0.60
Treble grade:			
Units P_2O_5	5,240	110,148	34,350
Value	$3,725	$57,026	$16,055
Unit value	$0.71	$0.52	$0.47
All grades:			
Units P_2O_5	25,287	231,276	76,625
Value	$17,272	$117,368	$41,607
Unit value	$0.68	$0.51	$0.54

[1] Each unit represents 20 pounds of P_2O_5.

The Pacific Coast Market

Testimony presented at the public hearing on September 12, 1933, indicates that no material amounts of superphosphate are shipped from the eastern United States to the west coast. Transportation charges and the smallness of the western market are factors operating against a large east-west movement of superphosphate. The relatively small consumption on the west coast is supplied by production in that area and by imports, mostly from Japan. The sole producer of treble superphosphate in that area is located in Montana. Three companies in California manufacture small amounts of the standard grade. The Commission obtained data covering production and sales by all these companies, but complete details cannot be shown without revealing confidential information. Domestic sales, in short tons, of treble superphosphate, as publicly reported by the one manufacturer in Montana, have been as follows: 21,722 in 1931; 14,144 in 1932; and 12,858 in the first 6 months of 1933.

Superphosphate is manufactured by this company largely as an outlet for sulphuric acid recovered from stack fumes resulting from certain smelting operations. Smelters must remove sulphur oxides, which are a menace to vegetation, from stack fumes. The sulphur oxides are converted to sulphuric acid, and this operation is a very important element in the cost of manufacturing superphosphate.

Exports

Exports of superphosphate, which in recent years have gone mostly to Canada and Cuba, are shown in table 16. There is no export to Japan. Export statistics do not separately distinguish the amounts of standard and treble grades. The standard grade, however, comprises the bulk of the total.

TABLE 16.—*Superphosphate: United States exports*

Year	Quantity	Value	Year	Quantity	Value
	Short tons			*Short tons*	
1922	29,995	$372,297	1929	95,332	$1,489,476
1923	47,151	534,446	1930	125,058	1,595,450
1924	51,241	588,620	1931	91,377	940,688
1925	73,672	988,914	1932	26,749	258,896
1926	72,186	937,278	1933	39,616	333,966
1927	120,408	1,615,466	1934[1]	66,248	606,142
1928	99,247	1,510,557			

[1] Preliminary.

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Price Quotations

Price quotations for standard superphosphate, basis 16 percent, run of pile, bulk, f. o. b. Baltimore, in dollars per short ton, are shown in table 17. Treble superphosphate is not quoted in trade journals.

TABLE 17.—*Superphosphate: Price quotations, f. o. b. Baltimore*

Month	1928	1929	1930	1931	1932	1933	1934
January	$8.50	$10.00	$9.50	$8.00	$7.50	$6.50	$7.50
April	8.50	10.00	8.50	8.00	7.50	6.00	7.50
July	9.60	9.50	8.50	8.00	7.50	7.00	8.00
October	10.00	9.50	8.50	7.50	7.00	7.50	8.00

Source: Oil, Paint and Drug Reporter.

Competitive Conditions

Although imports of superphosphate through the west coast customs districts have, since 1931, exceeded the combined output of west coast producers, total imports of superphosphate are only about 1 percent by quantity of the total domestic production. The relatively small consumption on the west coast is supplied entirely by the output of one producer in Montana and three producers in California, and by imports, mostly from Japan.

The manufacture of superphosphate was commenced in Montana to utilize supplies of sulphuric acid (raw material) removed from smelter stack fumes to abate a menace to vegetation and livestock. The phosphatic rock used comes principally from the large deposits in Idaho. Montana is not near centers of consumption of superphosphate and thus is at a disadvantage with respect to transportation costs. Eastern producers are nearer to deposits of phosphate rock, as well as to markets for superphosphate, and operate on a much larger scale than do western manufacturers. After adding $2 per ton for bagging to the quoted price of eastern superphosphate in bulk, f. o. b. Baltimore, the price per unit f. o. b. Baltimore is lower than that of either the western product or of Japanese imports c. i. f. west coast. No Japanese or western superphosphate is sold in the eastern markets.

The phosphate used in Japan in the production of superphosphate comes mainly from the United States, Egypt, French Oceania, and Makatea Island. In 1933, exports of phosphate rock from the United States to Japan (157,362 short tons, valued at $485,527) greatly exceeded imports of superphosphate from Japan (13,612 short tons, valued at $158,126). The fact that Japan is so largely dependent on outside sources for phosphate will probably prevent any great expansion of the production of superphosphate in that country.

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UNITED STATES TARIFF COMMISSION

DYES AND OTHER SYNTHETIC ORGANIC CHEMICALS IN THE UNITED STATES

1934

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SECOND SERIES

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INTRODUCTION

This report on the domestic dye and synthetic organic chemical industry is the result of an investigation made by the United States Tariff Commission as part of its regular work. It includes production and sales tabulations of coal-tar crudes, intermediates, dyes, and other finished coal-tar chemicals and synthetic organic chemicals of non-coal-tar origin in 1934.

It also includes detailed statistics for 1934 of imports of intermediates, dyes, and other finished coal-tar products, compiled from the monthly list of imports of dyes published jointly by the Department of Commerce and the Tariff Commission. Part VII also shows statistics of imports and exports of coal-tar products as reported in Foreign Commerce and Navigation of the United States.

In the preparation of this report, the Tariff Commission had the services of Dexter North and P. K. Lawrence, of the Chemical Division of the Commission's staff, and of others.

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DYES AND OTHER SYNTHETIC ORGANIC CHEMICALS

PART I

SUMMARY OF UNITED STATES PRODUCTION, IMPORTS, AND EXPORTS OF COAL-TAR AND OTHER SYNTHETIC ORGANIC CHEMICALS, 1934

Coal-Tar Crudes

The domestic production of coal-gas and coke-oven tars, reported to the Bureau of Mines in 1934, was 408,710,314 gallons as compared with 363,298,586 gallons in 1933. About 57 percent of the output in 1934 was distilled or processed to produce the coal-tar crudes shown in table 6. In addition 30,992,011 gallons of water-gas tar and 1,167,127 gallons of oil-gas tar were used.

A comparison of the production of tar and production and sales of certain crudes in 1934 with the average for 1925–30 and with 1933 is shown in table 1.

Table 1.—*Comparison of United States production of tar and production and sales of certain crudes, 1925–30, 1933, and 1934*

	1925–30 average	1933	1934	Increase 1934 over 1933
Tar produced.....thousands of gallons..	630,536	363,299	408,710	12.5
Benzol:				
Production.....do....	22,257	19,382	23,821	22.9
Sales.....do....	22,257	19,723	19,875	.8
Sales value.....thousands of dollars..	4,651	3,453	3,215	[1] 6.9
Motor benzol:				
Production.....thousands of gallons..	96,879	40,224	50,047	24.4
Sales.....do....	96,879	38,655	49,225	27.3
Sales value.....thousands of dollars..	15,920	4,380	4,616	5.4
Naphthalene:				
Production.....thousands of pounds..	44,762	30,621	37,922	23.8
Sales.....do....	44,762	25,253	31,930	26.4
Sales value.....thousands of dollars..	581	350	517	47.7
Creosote oil:				
Production.....thousands of gallons..	95,443	57,489	71,999	25.2
Sales.....do....	95,443	58,030	90,539	56.0
Sales value.....thousands of dollars..	11,742	4,779	8,297	73.6

[1] Decrease.

Coal-Tar Intermediates

In 1934 production of coal-tar intermediates reached the all-time peak of 407,727,846 pounds, an increase of 10 percent over 1933 and of more than 50 percent over the average for 1925–30. The 64 producers made more than 550 types of intermediates in 1934, or about 143 more than were produced in 1930.

Coal-Tar Dyes

There were 43 producers of dyes in 1934, reporting an output of 87,177,612 pounds, or 14 percent less than in 1933 and 7 percent less than the average for the period 1925–30. A corresponding decrease

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in sales volume and a slight increase in sales value of dyes is shown. The unit value of sales of all dyes increased to $0.51 per pound as compared with $0.44 per pound in 1933. The decrease in volume and the increase in the unit value of sales are due principally to decreased sales of the low-priced tonnage products—indigo and sulfur black. The output of indigo declined from 23,412,400 pounds in 1933 to 15,818,492 pounds in 1934, or 32 percent, while that of sulfur black decreased from 16,020,531 pounds to 9,790,047 pounds. These decreases are attributed to the building up of stocks in the preceding year in anticipation of increased prices and to decreased exports to China. Our exports of dyes to China decreased from 11,591,637 pounds in 1933 to 8,373,975 pounds in 1934.

Sales of new and unclassified dyes increased from 7,734,981 pounds valued at $7,794,740 in 1933 to 8,700,743 pounds valued at $8,961,992 in 1934. Activity in this group reflects new developments. Outstanding in the past year have been the increased variety and volume of dyes for acetate silk, rayon, and resins, and the many new shades for textiles.

Table 2 summarizes production and sales of intermediates and finished coal-tar products in 1934, and table 3 compares these data with earlier years.

TABLE 2.—*Dyes and other coal-tar chemicals: Summary of United States production and sales, 1934*

	Number of manufacturers	Production	Sales		
			Quantity	Value	Unit value
		Pounds	*Pounds*		
Intermediates	64	407,727,846	174,663,573	$27,033,009	$0.15
Finished products—total [1]	179	186,981,910	167,632,277	76,214,233	.45
Dyes:					
Classified		77,512,748	75,608,302	34,288,623	.45
Unclassified		9,664,864	8,700,743	8,961,992	1.03
Total	43	87,177,612	84,309,045	43,250,615	.51
Color lakes	38	8,114,865	7,839,562	5,805,107	.74
Photographic chemicals	9	996,052	829,002	957,508	1.16
Medicinals	39	10,023,626	8,224,416	7,921,529	.96
Flavors	14	1,903,132	1,812,234	1,928,892	1.06
Perfume materials	24	2,264,774	1,883,195	1,098,971	.58
Resins [1]	54	56,059,489	43,350,876	10,126,849	.23
Miscellaneous [2]	33	20,442,360	19,383,947	5,124,762	.26

[1] Does not include resins derived from coumarone and indene and from sulfonamide.
[2] Includes benzoate of ammonia, benzoate of soda, benzoyl peroxide, biological stains and chemical indicators, diazo salts, poisonous and tear gases, synthetic insecticides, naphthol A S series, rapid fast and rapidogene colors, synthetic tanning materials, textile assistants, and others.

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TABLE 3.—*Dyes and other coal-tar chemicals: Comparison of United States production and sales, 1925–30, 1933, and 1934*

	1925–30 average	1933	1934	Increase 1934 over 1933
Intermediates:				*Percent*
Production.....Thousands of pounds..	267,492	370,754	407,728	10.0
Sales.....do....	109,133	163,683	174,664	6.7
Sales value.....Thousands of dollars..	22,408	23,705	27,033	14.0
Finished coal-tar products: [1]				
Production.....Thousands of pounds..	138,078	[2] 176,206	[2] 186,982	6.1
Sales.....do....	133,964	[2] 162,092	[2] 167,632	3.4
Sales value.....Thousands of dollars..	65,027	[3] 68,993	[3] 76,214	10.5
Dyes:				
Production.....Thousands of pounds..	94,003	100,953	87,178	[4] 13.6
Sales.....do....	92,207	98,238	84,309	[4] 16.2
Sales value.....Thousands of dollars..	39,428	43,102	43,251	.3
Medicinals:				
Production.....Thousands of pounds..	4,508	8,715	10,024	15.0
Sales.....do....	4,106	8,070	8,224	1.9
Sales value.....Thousands of dollars..	7,464	6,828	7,922	16.0
Flavors and perfume materials:				
Production.....Thousands of pounds..	3,966	3,159	4,168	31.9
Sales.....do....	3,919	2,965	3,695	24.6
Sales value.....Thousands of dollars..	2,901	2,484	3,028	21.9
Resins:				
Production.....Thousands of pounds..	[5] 24,442	[5] 41,628	[5] 56,059	34.7
Sales.....do....	[5] 22,135	[5] 31,658	[5] 43,351	36.9
Sales value.....Thousands of dollars..	[4] 7,756	[5] 7,239	[5] 10,127	39.9

[1] Includes color lakes, photographic chemicals, and miscellaneous coal-tar products not shown separately.
[2] Does not include coumarone and indene resins.
[3] Does not include coumarone and indene and sulfonamide resins.
[4] Decrease.
[5] 1927–30 average.

IMPORTS AND EXPORTS OF DYES AND INTERMEDIATES

Imports of dyes in 1934 decreased 13.1 percent in quantity and 3.9 percent in value over 1933; compared with averages for the period 1925–30 the decreases were 25.2 percent and 13.9 percent, respectively. Imports of intermediates in 1934 increased 5.6 percent in quantity and 28.6 percent in value over 1933; compared with the averages for the period 1925–30, the year 1934 shows a decrease of 22.6 percent in quantity but an increase of 91.6 percent in value.

Exports of dyes in 1934 decreased slightly in quantity but increased 21 percent in value over 1933, the higher value being due chiefly to smaller shipments of the low-priced dyes, such as indigo and sulfur black which constitute the bulk of our exports. Separate statistics of exports of intermediates are not available for recent years. The quantity of dye exports in 1934 was equal to 20.6 percent of production in that year, compared with a ratio of 18.6 percent in 1933. In terms of value, dye exports in 1934 equaled 13 percent of domestic sales in both years.

RELATION OF PRODUCTION OF DYES TO CONSUMPTION

The apparent consumption (sales plus imports, less exports) of dyes in the United States in 1934 was 69,759,559 pounds, of which 95.1 percent was supplied by domestic producers, and the remaining 4.9 percent was imported.

In value, imports (invoice value) supplied 12 percent of the apparent consumption of dyes in 1934. Adding to the value of the imported dyes the amount of the duties paid and an allowance of 15 percent

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for expenses and profits, imports of dyes supplied about 20 percent of the domestic consumption by value in 1934.

Table 4 compares imports and exports of dyes and intermediates for the period 1925–30 and the years 1933 and 1934.

TABLE 4.—*Coal-tar intermediates and dyes: Comparison of United States imports and exports, 1925–30, 1933, and 1934*

	1925–30 average	1933	1934	Increase 1934 over 1933
Intermediates:				
Imports:				*Percent*
Quantity—thousands of pounds	2,536	1,859	1,964	5.6
Value—thousands of dollars	1,031	1,537	1,976	28.6
Dyes:				
Imports:				
Quantity—thousands of pounds	5,672	4,877	4,240	[1] 13.1
Value—thousands of dollars	6,338	5,676	5,456	[1] 3.9
Exports:				
Quantity—thousands of pounds	28,101	18,740	17,942	[1] 4.3
Value—thousands of dollars	6,366	4,653	5,630	21.0

[1] Decrease.

SYNTHETIC ORGANIC CHEMICALS OF NON-COAL-TAR ORIGIN

The output of synthetic organic chemicals not of coal-tar origin increased 47 percent over the preceding year to an all-time high of 1,133,644,032 pounds. The remarkable developments in this branch of the industry will be appreciated by a comparison with corresponding data for 1921, published for the first time in 1922 by the Tariff Commission. The output in 1921 totaled 21,545,186 pounds and the value of sales was $7,226,068 (revised figures) as compared with production of more than a billion pounds in 1934 with a sales value of $72,832,673.

TABLE 5.—*Synthetic organic chemicals and resins of non-coal-tar origin: Comparison of United States production and sales, 1925–30, 1933, and 1934*

	1925–30 average	1933	1934	Increase 1934 over 1933
Synthetic non-coal-tar chemicals:				
Production—thousands of pounds	379,972	771,575	1,133,644	*Percent* 46.9
Sales—do	264,006	542,679	639,353	17.8
Sales value—thousands of dollars	44,499	55,605	72,833	31.0
Non-coal-tar resins:				
Production—thousands of pounds	[1]	3,572		
Sales—do	[1]	3,256	3,501	7.5
Sales value—thousands of dollars	[1]	1,745	1,491	[2] 14.6

[1] No data. [2] Decrease.

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PART II

UNITED STATES PRODUCTION AND SALES OF DYES AND OTHER COAL-TAR CHEMICALS, 1934

Coal-Tar Crudes

The total domestic production of coal tar, the quantity distilled, production and sales of light-oil products and of the products of tar distillation and processing in 1934 are shown in table 6. These statistics were compiled from data obtained by the Bureau of Mines from tar producers and by the Tariff Commission from purchasers of tar.

TABLE 6.—*Coal-tar crudes:* [1] *United States production and sales, 1934*

[The numbers in the second column refer to the numbered alphabetical list of manufacturers given on p. 78. An X indicates that the corresponding product was made by a manufacturer who did not consent to the publication of his name in connection therewith. A blank in the third column indicates that the production figure cannot be published without revealing information in regard to the output of individual firms. A blank in the fourth and fifth columns indicates that the sales figure cannot be published without revealing information in regard to the output of individual firms. The figures thus concealed are, however, included in the total]

Tar distilled: [2]	
Oil-gas tar, 1,167,127 gallons	$48,909
Water-gas tar, 30,992,011 gallons	1,262,901
Coal tar, 231,826,608 gallons	10,303,963
Total, 263,985,746 gallons	11,615,773

	Manufacturers' identification numbers (according to list on p. 78) [3]	Production (quantity)	Sales		
			Quantity	Value	Unit value
Tar [3]—gallons		408,710,314	273,763,739	$10,760,125	$0.039
Light oil and derivatives:					
Crude light oil—do	89, 99, 147, 149, 155, 156, X, X, X.	119,287,276	12,073,697	1,026,052	.085
Benzol (except motor benzol), gallons	16, 132, 149, 166	23,820,592	19,875,080	3,215,164	.162
Motor benzol [3]—gallons		50,046,610	49,224,891	4,615,604	.094
Toluol, crude and refined [3] gallons		13,281,794	13,240,880	3,638,031	.275
Solvent naphtha—gallons	16, 47, 104, 132, 147, 155, 156.	3,878,554	3,592,029	688,557	.192
Xylol [3]—do		2,736,295	2,752,302	633,341	.230
Other light oil products [4] gallons	16, 132, 149	4,524,016	2,109,629	339,290	.161
Naphthalene, crude and refined, [5] pounds	16, 99, 104, 149, 155, 156, 161, 166.	37,922,455	31,930,189	516,938	.016
Anthracene, crude (less than 30 percent), pounds	104, 155				
Cumene—gallons	16				
Pyridine—do	16, 104, 155, 156				
Crude tar acids—do	16, 47, 89, 93, 104, 155, 156, 161, X.	16,754,462	1,263,404	304,300	.241
Creosote oil—do	16, 21, 47, 89, 93, 95, 99, 104, 108, 132, 155, 156, 161, X, X, X, X, X.	71,999,286	90,539,256	8,297,019	.092
Tars, crude and refined [3]—do	16, 89, 99, 104, 132, 149, 155, 156, 161, X, X, X.	13,414,731	11,021,318	880,618	.079
Tars, road [3]—do	16, 47, 89, 95, 104, 147, 149, 155, 156, 161, X, X.	132,307,554	137,482,713	10,608,770	.077
Other distillates [3]—do	16, 47, 99, 104, 132, 155, 156, X.	9,875,828	8,634,508	1,267,500	.147
Pitch of tar—tons	16, 21, 47, 89, 95, 99, 104, 132, 147, 155, 156, 161, X, X.	407,327	317,943	3,791,234	11.924
Pitch of tar coke [3]—do	16, 95, 104, 155, 156	45,128	53,056	502,368	9.469

[1] Data for coke ovens reporting to Bureau of Mines; and for tar refineries and others reporting to the United States Tariff Commission.
[2] Reported to the United States Tariff Commission only.
[3] Bureau of Mines only.
[4] Includes toluol and xylol reported to the United States Tariff Commission.
[5] Includes crude and refined naphthalene reported to Bureau of Mines and crude naphthalene reported to the United States Tariff Commission.

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Coal-Tar Intermediates

Among the coal-tar intermediates produced in increased quantities in 1934 were acetanilide, amino anthraquinone, Chicago acid, p-amino phenol, o-anisidine, anthraquinone, benzaldehyde, benzotrichloride, o-, m-, and p-chloroanilines, monochlorobenzene, mixed and separated cresols, o and p dichlorobenzene, dinitrophenol, diphenyl and derivatives, b-hydroxy naphthoic acid, maleic acid, a-naphthol, phenol, phthalic anhydride, and the rubber chemicals.

Slight decreases are noted for gamma acid, 1-amino-2-naphthol-4-sulfonic acid, aniline oil, benzidine, dimethylaniline, dinitrochlorobenzene, and others.

Commercial production of p-cresol is reported for the first time in 1934.

TABLE 7.—*Coal-tar intermediates: United States production and sales, 1934*

[The numbers in the second column refer to the numbered alphabetical list of manufacturers printed on p. 78. An X signifies that the manufacturer did not consent to the publication of his identification number with the designated product. A blank in the third column indicates that the production figure cannot be published without revealing information in regard to the output of individual firms. A blank in the fourth and fifth columns indicates that the sales of the corresponding product cannot be published without revealing information in regard to the individual firms. The figures thus concealed are, however, included in the total]

Intermediates	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
Total intermediates		*Pounds* 407,727,846	*Pounds* 174,663,573	$27,033,009	$0.15
Acetanilide, tech	36, 53, 74	122,573			
Acetoacetanilide	30, 53, X, X	112,874			
Acetotoluide	26, 125				
Acetyldiaminoanthraquinone	5				
1-Acetylmethylamino-4-bromoanthraquinone	53				
Acetyl-p-phenylenediamine (p-amino acetanilide)	4, 36, 53, 74, 125	146,317			
Acetyl-p-phenylenediamine sulfonic acid	74				
Acetyl-p-toluidine	53, X				
Acridine yellow	125				
p-Amino acetanilide. (See Acetyl-p-phenylenediamine.)					
1-Amino-4-acetylamino-6 and 7-naphthylamine sulfonic acid (acetylamino Cleve's acid)	53, 125				
a-Aminoanthraquinone and salt	53, 74				
b-Aminoanthraquinone	5, 53, 74, 125	445,522			
d-Aminoanthrarufin	5				
Aminoazobenzene and hydrochloride	5, 26, 36, 53, 125	129,920			
Aminoazobenzene sulfonic acid	5, 26, 36, 74, 125	38,947			
Aminoazobenzene disulfonic acid	5, 74, 125				
Aminoazotoluene	26, 36, 53, 69, 125	129,354			
Aminoazotoluene mono sulfonate	125				
Aminoazoxylene	5, 125				
Aminoazoxylene-toluidine	26				
Aminoazoxylidine	26				
8-Amino-1:2-benzacridone	53				
o-Aminobenzoic acid (anthranilic acid)	52, 53				
p-Aminobenzoic acid	53				
Amino-5-benzoylaminoanthraquinone	53				
m-Aminobenzoyl I acid	125				
m-Aminobenzoyl J acid	53				
p-Aminobenzoyl J acid	53, 74, 125				
m-Aminobenzoyl-m-phenylenediamine	53				
1-Amino-2-bromo-4-toluidine anthraquinone	53				
-Amino-6-chloroanthraquinone	53				

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TABLE 7.—*Coal-tar intermediates: United States production and sales, 1934*—Con.

Intermediates	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
		Pounds	*Pounds*		
2-Amino-4-chlorotoluene	125				
m-Aminocresol methyl ether	36				
1-Amino-2:4-dibromoanthraquinone	53				
p-Aminodiethylaniline	74				
p-Aminodiethyl benzaldehyde	53				
p-Aminodiphenylamine	53				
Aminodiphenyl ether	146				
p-Aminoethylbenzylaniline sulfonic acid.	53				
p-Amino-p-methoxy diphenylamine (anisidine nerol acid).	53				
1-Amino-2-methoxy naphthalene	53				
1-Amino-2-methyl-4-bromoanthraquinone.	53				
1-Amino-2-methyl-4-p-toluidine anthraquinone.	53				
1-Amino-2-naphthol-4-sulfonic acid	36, 53, 74, 125, 150				
1-Amino-8-naphthol-4-sulfonic acid	36, 53, 125	64, 139			
1-Amino-8-naphthol-2:4-disulfonic acid (Chicago acid).	36, 53, 125	141, 721			
1-Amino-8-naphthol-3:6-disulfonic acid (H acid).	53, 74, 123, 125	2, 865, 516			
2-Amino-5-naphthol-7-sulfonic acid (J acid).	4, 36, 53, 125	371, 980			
2-Amino-8-naphthol-6-sulfonic acid (gamma acid).	36, 53, 74, 125	665, 227			
2-Amino-8-naphthol-3:6-disulfonic acid (2 R acid).	4, 53, 125				
Amino-1-naphthylamine-6 and 7-sulfonic acid (amino Cleve's acid).	53				
o-Aminophenol	26, 53, 59, 190, 199	17, 572	14, 230	$18, 736	$1.32
o-Aminophenol sulfonic acid	36, 125				
p-Aminophenol and hydrochloride	26, 53, 59, 190, 199, X	350, 192	158, 141	121, 351	.77
m-Aminophenylpyrazolone carboxylic acid.	53				
p-Aminophenyl-p-tolylamine sulfonic acid.	36				
Aminosalicylic acid	4, 5, 36, 53	34, 269			
Amino Schaeffer ether	53, 74				
Amyl phenol (tertiary)	165				
Anhydroformaldehyde-p-toluidine	53				
Aniline disulfonic acid	36, 53, 125				
Aniline hydrochloride and sulfate	26, X				
Aniline methane sulfonic acid	74				
Aniline-a-naphthylamine	26				
Aniline nitro nerol acid	53				
Aniline oil	26, 52, 53, 120, 124, 125, X.	28, 578, 433	11, 951, 102	1, 381, 164	.12
Aniline omega sulfonic acid	53, 125				
o-Anisidine	53, 124				
o-Anisidine omega sulfonic acid	125				
p-Anisidine	125				
Anisidine nitro nerol acid	53				
Anthracene, refined	155, X				
1:9-Anthra isothiazole-2-carboxylic acid.	53				
Anthranilic acid. (See o-Aminobenzoic acid.)					
Anthraquinone (100 percent)	5, 26, 74, 125				
Anthraquinone-1:8-disulfonate	53				
Anthraquinone-a-sulfonic acid	5, 74, 125				
Anthraquinone-1:5-disulfonic acid	53, 74				
Anthraquinone-2:6-disulfonic acid	53, 74				
Anthraquinone-1-sodium sulfonate	53				
Anthraquinone-2-sodium sulfonate (silver salt).	5, 53, 125				
Azobenzene	X				
Benzaldehyde, tech	84				
Benzaldehyde disulfonic acid	5, 74				
Benzanthrone	5, 26, 53, 74, 125, 141	133, 258			
Benzene azo Cleve's acid	53				
Benzidine, base	4, 6, 36, 53, 125, X				
Benzidine hydrochloride and sulfate	4, 6, 53, 74, 125	1, 122, 659			
Benzidine sulfonic acids	36, 74				
Benzoic acid, tech	53, 84, 88, 124	38, 991	26, 068	9, 457	.36
Benzoic anhydride	88				
Benzotrichloride	84, 88, 124				

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TABLE 7.—*Coal-tar intermediates: United States production and sales, 1934*—Con.

Intermediates	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
		Pounds	*Pounds*		
1-Benzoylamino-4-chloroanthraquinone.	53				
1-Benzoylamino-5-chloroanthraquinone.	53				
1-Benzoylamino-5-p-toluene sulfonic anthraquinone.	53				
5-Benzoylamino-1:1-dianthrimide	53				
Benzoyl benzoic acid	53, 125				
o-Benzoyl benzoic acid	26				
Benzoyl chloride	52, 84, 88		643, 565	$122, 290	$0.19
Benzoyl J acid	36				
Benzyl chloride	84, 88				
Broenner's acid. (See 2-Naphthylamine-6-sulfonic acid.)					
Bromobenzanthrone	53				
Bromobenzene	52				
p-Bromomethylaminoanthraquinone.	74				
p-Bromophenol	X				
Chicago acid. (See 1-Amino-8-naphthol-2:4-disulfonic acid.)					
Chloroacetoacetylnaphthylamide	146				
1-Chloro-5-aminoanthraquinone	53				
1-Chloro-8-aminoanthraquinone	53				
p-Chloro-o-aminophenol	196				
Chloroaminophenol sulfonic acid	36				
Chloroaniline (o, m, and p)	53, 124, 190	27, 002			
p-Chloroaniline sulfonic acid	5, 36				
Chloroanisidine	190				
Chloroanthraquinone	26, 53, 74, 125				
o-Chlorobenzaldehyde	125				
Chlorobenzanthrone	5, 53, 125				
Chlorobenzene (mono)	52, 53, 74, 88, 124, 171		4, 530, 765	183, 602	.04
o-Chlorobenzoic acid	53, 125				
Chlorobenzoyl benzoic acid	26, 53, 125	579, 278			
1-Chloro-2-carboxy anthraquinone	53				
2-Chloro-1: 4-dihydroxy anthraquinone (chloroquinizarin).	53, 125				
Chlorometanilic acid	4, 53, 74, 125	30, 124			
Chloromethylanthraquinone	26, 53, 125	37, 682			
Chloronaphthalene (Halowax)	88, X				
o-Chloro-p-nitroaniline	4, 26, X				
p-Chloro-o-nitroaniline	53, 190				
1-Chloro-5-nitroanthraquinone	53				
1-Chloro-8-nitroanthraquinone	53				
4-Chloro-2-nitrotoluene	53				
6-Chloro-2-nitrotoluene	53				
o-Chlorophenol	53, 124				
p-Chlorophenol	124				
Chlorophenylhydrazine-p-sulfonic acid.	74				
Chlorophenylmethylpyrazolone sulfonic acid.	74				
Chlorosulfophenylmethylpyrazolone.	53				
Chlorotoluene	53, 88, 125				
o-Chloro-p-toluene sodium sulfonate	124				
Chloro-o-toluidine	53, 74, 125, 146				
Chlorotoluidine sulfonic acid	26, 36, 53, X	257, 136			
Chlorotolyl thioglycollic acid	53, 74, 125				
p-Chloro-p-xylidine	53				
p-Chloroxylyl thioglycollic acid	53				
Chromotropic acid. (See 1:8-Dihydroxynaphthalene-3:6-disulfonic acid.)					
Cleve's acid. (See 1-Naphthylamine-6 and 7-sulfonic acid.)					
Cresidine	53, 74				
Cresols	16, 104, 114, X	8, 929, 836	8, 559, 048	572, 738	.07
Cresol, meta-para	16, 155, X	2, 033, 424	1, 692, 149	101, 324	.06
o-Cresol	16, 155, X	835, 016			
p-Cresol	16				
o-Cresotinic acid	52				
Cresylic acid (refined)	16, 104, 114, 155, X	10, 949, 860	9, 230, 255	489, 231	.05
Crotilidine aniline	X				
Cumidine	17, 125, X				
Cyclohexane	53				
Dehydrothio-p-toluidine	53				

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TABLE 7.—*Coal-tar intermediates: United States production and sales, 1934*—Con.

Intermediates	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
		Pounds	*Pounds*		
Dehydrothio-p-toluidine sulfonic acid.	36, 53, 125	92,889			
m-Diaminoanisole	190				
Diaminoanthraquinone	5, 53, 74				
2:6-Diaminoanthraquinone	53, 74				
Diaminodibenzanthronyl	53				
Diaminodimethylacridine	146				
4:4-Diamino-2:2-dimethyldiphenylmethane.	53				
Diaminodimethylphenylacridine	146				
Diaminodiphenylamine sulfonic acid.	4, 36				
4:4-Diaminodiphenyl-2-sulfonic acid	125				
Diaminophenetol	26				
Diaminostilbene disulfonic acid	53, 74, 125	161,974			
1:5-Dianilidoanthraquinone-o-o-dicarboxylic acid (dicarboxylic-anthraquinone).	53				
Dianisidine	36, 53				
1:1-Dianthrachinylamine	74				
1:1-Dianthraquinone imine	53				
1:1-Dianthraquinone imine diamino	53				
1:1-Dianthraquinone imine-4:4-dibenzoyl diamino.	53				
1:1-Dianthraquinone imine-4:5-dibenzoyl diamino.	53				
1:1-Dianthraquinone imine dinitro	53				
1-Diazo-2-naphthol-4-sulfonic acid	36, 74, 125, 150				
Diazosalicylic acid	53, 125				
Dibenzacridone trianthrimid	53				
Dibenzanthrone	53				
2:2-Dibenzanthronyl	53				
13:13-Dibenzanthronyl	53				
13:13-Dibenzanthronyl selenide	53				
1:5-Dibenzoyldiaminoanthraquinone.	53				
Dibenzylamine	X				
Dibenzyl aniline	53				
Dibromoaminoanthraquinone	53				
Dibutoxy ethyl phthalate	136				
Dibutyl phthalate	7, 30, 43, 98, 124, 188, X, X.	2,648,951	2,787,675	$553,808	$0.20
Dichloroaniline	36, 88, 190				
Dichloroaniline nitrosamine	74				
Dichloroaniline sulfonic acid	53, 125, 146	12,952			
1:5-Dichloroanthraquinone	26, 53				
1:8-Dichloroanthraquinone	53				
o-Dichlorobenzene	52, 53, 88, 124	2,064,614	1,977,991	66,883	.03
p-Dichlorobenzene	52, 53, 88, 124, 171, X	6,524,877	6,353,861	684,698	.11
Dichlorobenzidine	36				
1:8-Dichloro-4:5-dinitroanthraquinone.	53				
Dichlorohydrazine sulfonic acid	146				
4:4-Dichloro indigo	53				
3:4-Dichlorophenol	53				
Dichlorophenylmethylpyrazolone carboxylic acid.	146				
Dichlorosulfophenylmethylpyrazolone.	53, 146				
Dichlorosulfophenylpyrazolone	36				
2:5-Diethoxy aniline	53				
Diethyl-m-aminophenol	53, 116				
Diethylaniline	52, 53				
Diethylaniline-m-sulfonic acid	53, 116				
Diethylene glycol monobutyl ether phthalate.	30				
Diethyl a-naphthylamine	53				
Diformyl-m-tolylenediamine	36				
1:4-Dihydroxy anthraquinone (quinizarin).	5, 53, 125, X	206,374			
1:5-Dihydroxy anthraquinone (anthrarufin).	53, 125				
1:8-Dihydroxy anthraquinone (chrysazin).	53				
2:2-Dihydroxy dinaphthyl	53				
5:5-Dihydroxy-7:7-disulfonic-2:2-dinaphthylamine (Rhoduline acid).	53				

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TABLE 7.—*Coal-tar intermediates: United States production and sales, 1934*—Con.

Intermediates	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
		Pounds	*Pounds*		
5:5-Dihydroxy-7:7-disulfonic-2:2-dinaphthylurea (J acid urea).	36, 53, 74, 125	149,365			
1:5-Dihydroxynaphthalene	125				
1:8-Dihydroxynaphthalene-3:6-disulfonic acid (chromotropic acid).	36, 53, 125				
5:5-Dihydroxy-di-b-naphthylamine-7:7-disulfonic acid (I acid imide).	125				
b-Di-p-hydroxyphenylpropane	X				
2:5-Dimethoxy aniline	53				
Dimethoxy diphenyl-bis-diazo-amino-tetramethyl-amino sulfate.	146				
Dimethoxydiphenyl-bis-diazo-imino piperidine.	146				
o-Dimethylaminobenzaldehyde	143				
Dimethylaniline	26, 52, 53, 125	2,406,557	625,831	$127,148	$0.20
Dimethyldianthraquinonyl	26, 53, 125	30,862			
Dimethyl phthalate	30, 124, 188				
Dinitroaniline	5, 26, 146, 190	58,344			
Dinitroanthraquinone	5, 53				
4:8-Dinitroanthrarufin	5				
Dinitroanthrarufin disodium sulfonate.	53				
Dinitrobenzene	26, 53, 125	1,434,816			
Dinitrobenzene sulfonic acid	36, 74				
Dinitrochlorobenzene	26, 53, 74, 124, 125	5,670,909	823,383	101,952	.12
Dinitrochrysazin disodium sulfonate.	53				
Dinitrodibenzanthronyl	53				
Dinitrohydroxydiphenylamine	36				
Dinitrophenetol	26				
Dinitrophenol	5, 26, 53, 74				
Dinitrostilbene	26, 53				
Dinitrostilbene disulfonic acid	53, 74, 125	148,511			
Dinitrotoluene	26, 53, 125				
Dinitrotoluene sulfonic acid	36				
1:5-Dioxaminoanthraquinone	53				
1:8-Dioxaminoanthraquinone	53				
1:5-Dioxamino-4:8-dinitroanthraquinone.	53				
1:8-Dioxamino-4:5-dinitroanthraquinone.	53				
Dioxy dibenzanthrone	53				
Diphenyl and derivatives	52, X				
Diphenylamine	53				
Diphenyl epsilon acid	53				
Diphenylether-2-diazoaminodicarboxy pyrrolidine.	146				
Diphenylethylenediamine	82				
Diphenylguanidine. (See Rubber chemicals.)					
Diphenylguanidine succinate	X				
Diphenylmethane sulfonate	125				
Diphenyl-p-phenylenediamine	53				
Diphenylphthalate	124				
Diphenyltetrahydro glyoxaline	82				
Dipyrazol dianthrone	53				
Distilbenediphenol	125				
1:5-Di-p-toluidine anthraquinone	53				
1:8-Di-p-toluidine anthraquinone	53				
1:4-Di-p-tolylaminoanthraquinone	53				
Di-o-tolylethylenediamine	82				
Ditolylguanidine	53, X				
Ditolylmethane	125				
Ethoxyethyl phthalate	188				
6-Ethoxy-3-hydroxy thionaphthalene.	53				
Ethylacetanilide	125				
Ethyl-p-aminoacetanilide	125				
Ethyl-o-amino-p-cresol	53				
Ethylaniline (mono)	53, 125				
Ethylbenzylaniline	53, 125				
Ethylbenzylaniline sulfonic acid	36, 53, 74, 125	263,379			
Ethylbenzyl benzoate	X				
Ethylbenzyl-m-toluidine	53, 125				
Ethylbenzyl-m-toluidine sulfonic acid.	53, 74, 125				
Ethylidine aniline	53				

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TABLE 7.—*Coal-tar intermediates: United States production and sales, 1934*—Con.

Intermediates	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
		Pounds	*Pounds*		
Ethyl indamine	4				
Ethyl-b-naphthylamine	53				
Ethyl phenazine	4				
a-Ethyl-b-propylacrylaniline	82				
Ethyl-m-toluidine	53				
Ethyl-o-toluidine	53				
Ethyl-o-toluidine-p-sulfonic acid	53				
Ethyl-m-tolylenediamine	4				
Fast yellow L	4				
Fluorescein	8, 26, X	92,742			
Formanilide. (See Rubber chemicals.)					
Formaniline	53				
Formyl-m-tolylenediamine	4				
Fumaric acid	X				
Gamma acid. (See 2-Amino-8-naphthol-6-sulfonic acid.)					
H acid. (See 1-Amino-8-naphthol-3:6-disulfonic acid.)					
2-1-2:1-Hydrazine dibromoanthraquinone	53				
a-Hydroxyanthraquinone	5, 53				
1-Hydroxy-2:4-dianilido anthraquinone	53				
p-Hydroxydiphenylamine	53				
b-Hydroxy naphthoic acid	53, 74, 125				
1-Hydroxy-4-nitroanthraquinone	53				
1-Hydroxy-4-p-tolylaminoanthraquinone	53				
Indamine	4				
Indophenol (blue and green)	4, 53, 125	150,839			
Isatin	125				
Iso resinduline	53				
Iso violanthrone	5, 53				
Laurent's acid. (See 1-Naphthylamine-5-sulfonic acid.)					
Leuco-1:4-dimethyldiaminoanthraquinone	53				
Leuco quinizarin	5, 53				
Maleic acid and anhydride	7, 124, 125				
Metanilic acid	4, 53, 125				
Methoxychlorobenzene diazoaminocarboxy pyrrolidine	146				
Methoxyethyl phthalate	188				
Methoxy omega sulfonic acid	53				
Methylaminoanthraquinone	74				
1-Methylamino-4-bromoanthraquinone	53				
4-Methyl-4-aminodiphenylamine-2-sulfonic acid	74				
1-Methylamino-4-p-toluidine anthraquinone	53				
b-Methylanthraquinone	26, 53				
2-Methylbenzanthrone	125				
2-Methyldiphenylether-2-diazoamino-b-hydroxy-a-carboxy-pyrrolidine	146				
Methylene dianilide	53				
Methylnitroanisole	74				
Methylpyridone-4-bromoanthraquinone	53				
Methylpyridone-4-p-toluidine anthraquinone	53				
2-Methyl quinoline (quinaldine)	116, 125				
Michler's hydrol. (See Tetramethyldiamino benzhydrol.)					
Michler's ketone. (See Tetramethyldiamino benzophenone.)					
Monobenzene-p-aminophenol	53				
Naphthalene, solidifying 79° C. or above (refined, flake.)	16, 26, 53, 155, 197, X	38,729,697	21,256,654	$1,099,647	$0.05
1:5-Naphthalene disulfonic acid	36, 53, 74, 125	81,505			
2:7-Naphthalene disulfonic acid	53, 125, X				
Naphthalene sodium sulfonate	74, X				
b-Naphthalene sulfonic acid	53, X				
Naphthalene-b-thioglycollic acid	53				

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TABLE 7.—*Coal-tar intermediates: United States production and sales, 1934*—Con.

Intermediates	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
		Pounds	*Pounds*		
Naphthalene-1:3:6-trisulfonic acid	74				
Naphthionic acid. (See 1-Naphthylamine-4-sulfonic acid.)					
a-Naphthol	36, 53, 74, 125	811,620	426,554	$228,092	$0.53
a-Naphthol-3:6-disulfonic acid	36, 125				
b-Naphthol, tech	26, 125				
1-Naphthol-8-chloro-3:6-disulfonic acid (chloro H acid).	125				
1-Naphthol-4-sulfonic acid (Neville & Winther's acid).	4, 36, 53, 125	114,722			
1-Naphthol-5-sulfonic acid	36, 53, 74, 125	74,951			
1-Naphthol-2:4:7-trisulfonic acid	26				
2-Naphthol sulfonic acid	53				
2-Naphthol-6-sulfonic acid (Schaeffer's acid.)	4, 26, 36, 53, 74, 125	161,143			
2-Naphthol-7-sulfonic acid	36, 53, X				
2-Naphthol-8-sulfonic acid	36				
2-Naphthol-3:6-disulfonic acid	53, 74, 125, X	296,428	130,953	52,613	.40
2-Naphthol-6:8-disulfonic acid	36, 53, 74, 125	851,831			
a-Naphthylamine	53, 74, 125		838,709	202,804	.24
a-Naphthylamine disulfonic acid	53				
b-Naphthylamine	53, 125, X		89,702	36,725	.41
b-Naphthylamine disulfonic acid (2:1:5 & 2:1:7).	36				
1-Naphthylamine-2-sulfonic acid (o-naphthionic acid).	53				
1-Naphthylamine-4-sulfonic acid (naphthionic acid).	36, 125, X				
1-Naphthylamine-5-sulfonic acid (Laurent's acid).	4, 36, 53, 74, 125	124,797			
1-Naphthylamine-6-sulfonic acid	53, 74, 125				
1-Naphthylamine-6 and 7-sulfonic acid (Cleve's acid).	4, 36, 53				
1-Naphthylamine-7-sulfonic acid	125				
1-Naphthylamine-8-sulfonic acid	4, 53, 74, 125	205,128			
1-Naphthylamine-3:8-disulfonic acid	53, 125				
1-Naphthylamine-4:8-disulfonic acid	36, 53, 125	273,293			
1-Naphthylamine-3:6:8-trisulfonic acid.	53, 74, 125	3,341,100			
2-Naphthylamine-1-sulfonic acid (Tobias acid).	4, 26, 36, 53, X	786,071	321,019	218,286	.68
2-Naphthylamine-6-sulfonic acid (Broenner's acid).	36, 53, 125	35,777			
2-Naphthylamine-7-sulfonic acid	26				
2-Naphthylamine-3:6-disulfonic acid	125				
2-Naphthylamine-4:8 disulfonic acid	36, 53, 74, 125	87,805			
2 Naphthylamine-5:7-disulfonic acid	36, 53, 125	636,542			
2-Naphthylamine-6:8-disulfonic acid	36, 53, 125				
2-Naphthylamine-3:6:8-trisulfonic acid.	125				
1-Naphthylamino-2-carboxylic acid anthraquinone.	53				
Nevile & Winther's acid. (See 1-Naphthol-4-sulfonic acid.)					
p-Nitroacetanilide	4, 36, 74	92,820			
Nitroacetoacetylnaphthylamide	146				
p-Nitro-p-aminodiphenylamine-o-sulfonic acid.	4, 53				
4-Nitro-2-aminoanisole	125				
Nitroaminophenol	4, 5, 36, 53, 74, 125, 146	56,434			
o-Nitroaniline	124				
m-Nitroaniline	26, 53, 190	107,977	79,863	45,790	.57
p-Nitroaniline	116, 124				
p-Nitroaniline sulfonic acid	36, 53, 125	48,584			
p-Nitro-o-anisidine	53				
o-Nitroanisole	36, 53, 124				
p-Nitroanisole	53				
Nitrobenzene	26, 53, 124, 125, X	42,805,955			
Nitrobenzene-2:5-disulfonic acid	36				
Nitrobenzene sulfonic acid	36, 53, 74, 125	226,540			
p-Nitrobenzene J acid	74				
m-Nitrobenzoic acid	53				
p-Nitrobenzoic acid	1, 53				
m-Nitrobenzoyl chloride	53, 88				
m-Nitrobenzoyl sulfonic acid	5				
p-Nitrobenzoyl chloride	53, 88				
Nitrochloroanisole	146				
o-Nitrochlorobenzene	53, 124				

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TABLE 7.—*Coal-tar intermediates: United States production and sales, 1934*—Con.

Intermediates	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
		Pounds	*Pounds*		
o-Nitrochlorobenzene-p-sulfonic acid	125				
p-Nitrochlorobenzene	53, 124				
p-Nitrochlorobenzene-o-sulfonic acid	26, 36, 53, 125	183, 597			
2-Nitro-4-chlorotoluene	125				
Nitrocresol	53				
m-Nitro-p-cresol	36				
Nitrocresol methyl ether	53				
8-Nitro-1-diazo-2-naphthol-4-sulfonic acid.	74, 125, 150	45, 052			
Nitro-p-dichlorobenzene	36, 190				
1-Nitro-2-methyl anthraquinone	53				
Nitronaphthalene	53, 74, 125				
2-Nitronaphthalene-4 : 8-disulfonic acid.	36				
o-Nitrophenetol	53, 74				
o-Nitrophenol	53, 190				
p-Nitrophenol	26, 53, 124, 190				
Nitrophenylmethylpyrazolone	146				
Nitrosodiethylaniline	74, 199				
Nitrosodimethylaniline	53, 74, 125				
Nitrosoethylbenzylaniline	74				
Nitrosophenol	26, 36, 53, 59, 125, 199	367, 840			
Nitrotoluene	26, 53, 125				
o-Nitrotoluene	53, 125				
o-Nitrotoluene sulfonic acid	5, 26				
m-Nitrotoluene	53				
p-Nitrotoluene	53, 125				
p-Nitrotoluene-o-sulfonic acid	4, 36, 53, 74, 125	731, 215			
o-Nitro-p-toluidine	53				
m-Nitro-p-toluidine	26, 53, 142, X	444, 089	427, 474	$560, 035	$1.31
p-Nitro-o-toluidine	53				
Nitroxylene	53, 125				
Oxalyl-p-nitroaniline	53				
Oxalyl-m-phenylenediamine	53, 125				
Oxalyl-p-phenylenediamine	53, 74				
Oxychlorobenzoyl benzoic acid	125				
Oxydichlorobenzoyl benzoic acid	125				
Oxyphenyl-b-naphthylamine	53				
Penta anthramide	53				
Phenazine	4				
o-Phenetidine	53, 74, 124				
p-Phenetidine	26, 52, 53, 124				
Phenol	16, 52, 104, 114, 124, 155, X.	44, 934, 782	36, 240, 846	3, 886, 693	.11
Phenyl-2-amino-5-naphthol-7-sulfonic acid (phenyl J acid).	36, 53, 125				
Phenyl-2-amino-8-naphthol-6-sulfonic acid (phenyl gamma acid).	36, 53, 146	11, 933			
Phenylammonium naphthalate	26				
Phenylated rosaniline	26				
m-Phenylenediamine	4, 5, 26, 36, 53, 125, 150	478, 677			
m-Phenylenediamine sulfonic acid	36, 53, 74, 125	57, 041			
p-Phenylenediamine	26, 190				
p-Phenylenediamine sulfonic acid	36				
Phenylglycine, sodium salt	52, 53, 125	6, 125, 611			
Phenylhydrazine and hydrochloride	6, 26, 52, 146				
Phenylhydrazine-o-sulfonic acid	74				
Phenylhydrazine-p-sulfonic acid	74, X				
Phenyl malonic diethyl ester	1				
Phenylmethylpyrazolone	26, 30, 52, 53, 74, 146, X				
Phenyl-a-naphthylamine	53, 125				
Phenyl-b-naphthylamine	53, 74, 78				
Phenyl-1-naphthylamine-8-sulfonic acid.	4, 53, 74, 125	218, 324			
Phenyl-b-naphthylnitrosamine	X				
o-Phenylphenol	52				
p-Phenylphenol	52				
Phloroglucinol	60, 142				
Phthalamide	53, X				
Phthalic acid and anhydride	7, 53, 124, 125	20, 680, 379	13, 511, 253	1, 575, 787	.12
Phthalyl chloride	124				
Picramic acid	125				
Primuline, base	36, 53, 125	106, 987			
Proline	146				
Pyrazol anthrone	53				
Quinaldine. (See 2-Methyl quinoline.)					

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TABLE 7.—*Coal-tar intermediates: United States production and sales, 1934*—Con.

Intermediates	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
		Pounds	*Pounds*		
Quinaldine yellow base	125				
Red KB base	74				
Resorcinol, tech	53, 142				
Rhoduline acid. (See 5:5-Dihydroxy-7:7-disulfonic-2:2-dinaphthylamine.)					
Rosaniline base	8, 26				
Rubber chemicals, other		15,027,250	9,936,456	$4,007,764	$0.40
Acetone and aniline condensation products.	X				
Aldehyde amine condensation products.	53, 160, X	820,219	766,538	260,402	.34
Anhydroformaldehydeaniline (formanilide).	26, 53, 160	63,037			
Benzothiazole thiobenzoate	X				
Benzothiazyl disulfide	X				
Benzothiazyl-ethyl-thiol carbonate.	X				
Butylaldehyde and aniline condensation products.	53, 160, X				
Crotonylidine-a-naphthylamine	78				
2:4-Diaminodiphenylamine	X				
Dimethyl ammonious dimethyldithio carbamate.	78				
s-Di(b-naphthol) p-phenylenediamine.	78				
Dinitrophenylbenzothiazyl sulfide.	X				
Dinitrophenylester of dimethyldithiocarbamic acid.	X				
Diphenylamine and acetone condensation products.	X				
Diphenylguanidine	7, 52, 53, 160	1,405,364	1,100,340	364,609	.33
Diphenylguanidine acetate and dinitrophenyl ester of mercaptobenzothiazole mixture.	X				
Diphenylguanidine and dinitrophenyl ester of mercaptobenzothiazole mixture.	X				
Diphenylguanidine phthalate	X				
Diphenylguanidine phthalate and dinitrophenyl ester of mercaptobenzothiazole mixture.	X				
Ditolylamines	78				
Di-o-tolylthiourea	53				
Heptaldehyde plus aniline oil	X				
Hexamethylenetetramine ester of mercaptobenzothiazole.	X				
Mercaptobenzothiazole	X, X				
Methylene aniline mercaptobenzothiazole.	X				
Methylene-mercaptobenzothiazole.	X				
Methylene-p-toluidine	78				
Phenyl-b-naphthylamine and acetone condensation products.	X				
Polybutylidine aniline	78				
Polyethylenepolyamine plus b-naphthol.	X				
Sulfonated thiocarbanilide-acetaldehyde ammonia compounds.	X				
Salicylic acid, tech	52, 124				
Salicylic anilide (shirlan)	53				
Schaeffer's acid. (See 2-Naphthol-6-sulfonic acid.).					
Silver salt. (See Anthraquinone-2-sodium sulfonate.).					
Sodium benzene disulfonate	53				
Sodium dinitrophenyl	60				
Sodium naphthionate	4, 26, 53				
Sodium o-phenylphenate	52				
Sodium picramate	26, 53				
Sodium sulfanilate	5				
Sodium tetrachlorophenate	52				
Sulfanilic acid	5, 6, 26, 36, 114, 125, 190	1,633,680			

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TABLE 7.—*Coal-tar intermediates: United States production and sales, 1934*—Con.

Intermediates	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
		Pounds	*Pounds*		
o-Sulfobenzaldehyde	53				
p-Sulfo-o-benzoyl benzoic acid (sulfo BB acid).	53				
1-Sulfo-5-nitroanthraquinone	53				
Sulfophenylmethylpyrazolone	5, 36, 53, 146				
Sulfophenylmethylpyrazolone carboxylic acid.	146				
p-Tertiary butyl phenol	52				
Tetraaminoditolylmethane	53				
Tetrachlorofluorescein	26				
Tetrachlorophthalic anhydride	125				
Tetraethyldiaminobenzophenone	53				
Tetramethyldiaminoacridine	146				
Tetramethyldiamino benzhydrol (Michler's hydrol).	53, 74				
Tetramethyldiaminobenzophenone (Michler's ketone).	53, 74				
Tetramethyldiaminodiphenylmethane.	26, 53, 74, 116, 125, 146	526,089			
Thioaniline	4				
Thioaniline disulfonic acid	125				
Thiocarbanilide	53, 125, 160				
Thiophenyl-b-naphthylamine	X				
Tolazine, base	125				
Tolidine and salts	36, 53, 125	196,823			
Tolidine disulfonic acid	146				
o-Toluene sulfamide	124				
p-Toluene sulfamide	124				
p-Toluene sulfochloride	124				
p-Toluene sulfonic acid ethyl ester	5				
Toluidine	26, 53				
Toluidine disulfonic acid	4, 26				
o-Toluidine	26, 53, 125				
o-Toluidine omega sulfonic acid	125				
o-Toluidine sulfonic acid	26, 53, 125	60,711			
m-Toluidine	53, 125				
p-Toluidine	53, 125				
p-Toluidine sulfonic acid	36, 53, 190				
p-Tolyl-o-benzoic acid	26, 53, 125	122,564			
m-Tolylenediamine	5, 26, 36, 53, 74, 125	639,925	234,665	$149,094	$0.64
m-Tolylenediamine sulfonic acid	4, 36, 53, 125	9,218			
p-Tolylenediamine	26				
p-Tolyl-b-naphthylamine	53				
Tolyl-1-naphthylamine-8-sulfonic acid (tolyl peri acid).	4, 53, 74, 125	57,776			
Trichlorobenzene	88				
Tricresylphosphate	124, 136, X, X				
Trinitrophenol	53, 125				
Triphenylguanidine	53, 125				
Triphenylphosphate	52, 124				
m-Xylene	53				
Xylidine	125				
Xylidine and salt	26, 36, 53, 125				
Xylidine, ortho and para	4, 26, 53, 125	45,324			
m-Xylidine	53				
m-Xylidine acetate	4				
m-Xylidine sulfonic acid	53, 125				
Other coal-tar intermediates	53				

DYES AND OTHER FINISHED COAL-TAR PRODUCTS

INTRODUCTION

The finished products derived from coal tar may be divided into eight groups: (1) Dyes, (2) color lakes, (3) photographic chemicals, (4) medicinals, (5) flavors, (6) perfume materials, (7) resins, and (8) miscellaneous products. This classification is necessarily an arbitrary one, since many of the commodities listed herein may belong in two or more of these groups. Under the group "Miscellaneous Products"

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certain of those listed would be classified under the tariff act as intermediates. Since they are more often used as finished products they are here so classified. Likewise under "Intermediates" are many items now largely used for other purposes, such as the rubber chemicals.

DYES

With the exception of indigo and sulfur black, the production of dyes in 1934 was about the same as in 1933. In 1934 the output of all classified dyes was 77,512,748 pounds as compared with 93,172,314 pounds in 1933. These figures represent a decrease of 15,659,566 pounds, of which 13,824,392 pounds or 88 percent is accounted for by decreased production of indigo and sulfur black. A trend from certain standard tonnage dyes to vat and new and unclassified dyes is indicated. Compared with 1933 the output in 1934 of Acid black 10B (Colour index No. 246) declined 23 percent; Fast cyanine 5R (Colour index No. 289) declined 26 percent; Developed black BHN (Colour index No. 401) declined 16 percent; Auramine (Colour index No. 655) declined 33 percent; Methyl violet and base (Colour index No. 680) declined 15 percent; and the classified pyrazolone dyes decreased 12 percent. Increased production is shown for Eosine (Colour Index No. 768), 33 percent; Nigrosine, spirit-soluble (Colour index No. 864), 64 percent; Anthraquinone vat golden orange G (Colour index No. 1096), 44 percent; Anthraquinone dark blue BO (Colour index No. 1099), 132 percent; Anthraquinone violet RR (Colour index No. 1104), 97 percent; Anthraquinone blue GCD (Colour index No. 1113), 47 percent; and Vat orange R (Colour index No. 1217), 16 percent. There was a sharp rise in the output of food dyes, such as Amaranth (Colour index No. 184); Ponceau 3R (Colour index No. 80); and Tartrazine (Colour index No. 640), which increased 92, 48, and 43 percent, respectively.

The unclassified dyes continue to increase in volume and variety. In 1934 the output totaled 9,664,864 pounds, which was 24 percent more than in 1933.

COLOR LAKES

The production of color lakes amounted to 8,114,865 pounds in 1934, an increase of 7 percent over 1933. Sales of 7,839,562 pounds, valued at $5,805,107, represent an increase of 3 percent in volume and 11 percent in value.

PHOTOGRAPHIC CHEMICALS

The production of photographic chemicals in 1934 was 996,052 pounds, an increase of 20 percent over the preceding year. Sales volume increased 20 percent, to 829,002 pounds, and sales value 41 percent. The production of hydroquinol, quantitatively the most important item in this group, increased to 647,892 pounds, or by 12 percent.

MEDICINALS

As compared with 1933 there was an increase of 15 percent in 1934 in the production of coal-tar medicinals, of 2 percent in sales volume, and of 16 percent in sales value. The output of acetyl salicylic acid (aspirin), amounting to 3,791,117 pounds, was 20 percent greater in

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1934 than in 1933; the unit value of sales, however, dropped from $0.62 to $0.57 per pound. Phenobarbital showed an increase of 17 percent in output, but a decline in the unit value of sales from $6.99 to $5.96 per pound.

FLAVORS

The production of flavors in 1934 was 1,903,132 pounds as compared with 1,738,815 pounds in 1933, an increase of 9 percent. The outstanding item among the flavors showing an increase was vanillin, the production of which was 232,920 pounds, or 19 percent greater than in 1933. Sales of vanillin showed a decrease in unit value from $4.06 to $3.36 per pound.

PERFUME MATERIALS

Some 74 perfume materials of coal-tar origin were produced commercially in 1934 as compared with 60 in 1933. The output in 1934 was 2,264,774 pounds, an increase of 59 percent over 1933. Sales of 1,883,195 pounds, valued at $1,098,971, represent an increase of 54 percent in volume and 60 percent in value.

RESINS

The production of resins derived from phenol and cresol reached an all-time peak of 40,663,565 pounds in 1934, or 28 percent more than in 1933. Resins derived from phthalic anhydride increased 53 percent in output, with sales of 7,084,602 pounds, valued at $1,022,436, as compared with 3,654,854 pounds, valued at $673,890, in 1933. Commercial production of resins derived from styrol, from xylenol, and sulfonamide was reported for the first time in 1934. Cast phenolic resins are shown separately for the first time in 1934.

MISCELLANEOUS PRODUCTS

A greater variety and a larger volume of products are classified in this group in 1934 than heretofore, production in 1934 totaling 20,442,360 pounds as against 13,340,514 pounds the preceding year. In value of sales there was an increase from $3,437,421 to $5,124,762. Textile assistants, with an increase of 142 percent, were the outstanding item in the group. The increase may have been due, in part, to incomplete coverage in 1933, the number of products reported in 1934 being 26 as compared with 13 in 1933.

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*

[The numbers in the third column refer to the numbered alphabetical list of manufacturers printed on p. 78. An X signifies that the manufacturer did not consent to the publication of his identification number with the designated product. A blank in the fourth column indicates that the production figures cannot be published without revealing information in regard to the output of individual firms. A blank in the fifth and sixth columns indicates that the sales of the corresponding product cannot be published without revealing information in regard to the individual firms. The figures thus concealed are, however, included in the total]

Colour index no.	Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
				Quantity	Value	Unit value
			Pounds	*Pounds*		
	Total finished coal-tar products.[1]		186,981,910	167,632,277	$76,214,233	$0.45
	CLASSIFIED DYES					
	NITROSO DYES					
2	Fast printing green	74				
5	Naphthol green	4, 26				
	NITRO DYES					
10	Naphthol yellow S	26, 36, 125				
	AZO DYES					
	Monoazo Dyes					
16	Acid yellow G	5				
17	Spirit yellow R	5, 44, 69, 125	32,533			
19	Butter yellow	5, 44, 69, 74, 125	11,598	9,497	7,077	.75
20	Chrysoidine Y	5, 26, 44, 74, 125	256,854	283,611	97,882	.35
21	Chrysoidine R	4, 26, 44, 53, 74, 125				
23	Oil orange	44				
24	Sudan I	5, 26, 44, 53, 69, 74, 125	168,003	181,759	96,741	.53
26	Croceine orange	5, 36, 125				
27	Orange G	36, 53, 74, 125	121,574	119,104	61,244	.51
29	Chromotrope 2R	53, 125				
30	Fast acid fuchsine B	5, 125				
31	Amido naphthol red G	4, 5, 26, 36, 53, 74, 125	245,965	185,513	69,022	.37
36	Chrome yellow 2G	5, 27, 36, 44, 74, X	118,415	83,722	35,247	.42
40	Chrome yellow R	4, 5, 26, 36, 74, X	51,460	46,798	28,826	.62
52	Mordant yellow 4G	5, 36				
53	Victoria violet	26, 36, 53, 74, 125	63,430	50,443	34,574	.69
54	Lanafuchsine	X				
55	Azo coralline	74				
56	Chromotrope 6B	36, 125				
57	Amido naphthol red 6B	4, 5, 26, 36, 53, 74, 125	150,181	127,204	62,597	.49
69	Toluidine red RL	X, X				
73	Sudan II	4, 5, 44, 69, 74, 125	14,840			
79	Ponceau 2R	4, 5, 26, 36, 53, 74, 125, X	249,878	210,974	83,688	.40
83	Acid brown 3R	X				
84	Double ponceau R	53, 74				
88	Bordeaux B	4, 26, 36, 53, 125	98,488	78,058	34,331	.44
90	Chromotrope 10B	53				
98	Chrome brown R	36, 74				
101	Chromate brown B	26, 150				
105	Acid chrome brown R	4, 53				
110	Chrome flavine G	74				
114	Azo eosine G	53				
119	Eosamine G	53				
122	Chrome yellow 5G	36				
126	Direct pink E2GN	53				
128	Direct pink	125				
130	Direct pink EBN	53				
138	Metanil yellow	36, 53, 74, 125	442,146	413,210	207,779	.50
142	Methyl orange	6, 53				
145	Azo flavine 2R	74				
146	Azo yellow	5, 53, 74, 125	75,631	72,488	49,163	.68
148	Resorcin yellow	4, 26, 125				
151	Orange II	26, 36, 74, 125	1,148,973	996,791	255,346	.26
153	Azo fuchsine G	74				
156	Permanent orange R	5				
160	Hansarubine	74				
161	Orange R	26, 53, 125	166,193			
163	Lake red 4B	36, 53, 125, X	79,854	66,479	82,856	1.25

[1] Does not include resins derived from coumarone and indene and sulfonamide.

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Colour index no.	Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
				Quantity	Value	Unit value
	CLASSIFIED DYES—Contd.					
	AZO DYES—Continued					
	Monoazo Dyes—Continued		*Pounds*	*Pounds*		
165	Lake red C (100 percent)	5, 26, 53, 67, X, X	434,277	304,440	$345,003	$1.13
167	Acid chrome brown B	125				
168	Acid chrome garnet R	36, 74, 125	14,303	13,354	11,022	.83
169	Chrome violet R	36, 53, 125				
170	Chrome black PV	74, 125				
171	Chrome brown RR	74				
176	Fast red A	26, 36, 53, 74, 125	65,670	75,098	38,536	.51
179	Azo rubine	36, 53, 74, 125	94,028	85,775	44,510	.52
180	Fast red VR	26, 36, 74, 125, 200	67,877	61,625	29,142	.47
182	Fast red E	4				
183	Croceine scarlet 3BX	36				
184	Amaranth	5, 26, 36, 74, 125, X	35,903	24,428	11,666	.48
185	Cochineal red	26, 36, 74, 125	61,463	62,241	30,753	.49
189	Lake red R (100 percent)	36, 74, 125, 169, X, X				
195	Mordant yellow	4, 36, 125				
197	Chrome yellow RN	125				
201	Chrome blue black B	36, 53, 125				
202	Chrome blue black U	4, 36, 53, 74, 125	1,116,939	926,266	264,687	.29
203	Chrome black T	36, 74, 125				
204	Chrome black A	36, 74, 125, 150				
208	Fast acid blue R	4, 53, 74, 125	87,499	81,502	43,741	.54
209	Fast acid blue B	53, 74, 125	19,078			
211	Methyl red	6				
214	Lake red D	X				
216	Chrome red B	4, 36, 44, 53, 74, 125, X	48,724	71,440	37,227	.52
225	Direct pink R	26, 53				
	Disazo Dyes					
234	Resorcin brown B	4, 5, 26, 36, 53, 74, 125, 200.	228,228	260,324	139,860	.54
235	Resorcin dark brown	4, 5, 26, 44, 74, 125	38,956	43,633	34,662	.79
238	Acid chrome brown G	53				
246	Acid black 10B	4, 5, 26, 36, 53, 74, 125, 150, 200.	950,549	853,121	355,393	.42
247	Acid dark green A	36, 44, 53, X		21,500	8,198	.38
248	Sudan G	5				
249	Cloth red R	36				
252	Brilliant croceine	26, 36, 53, 74, 125	319,941	334,308	249,286	.75
256	Cloth red 3G	53				
258	Sudan IV	36, 44, 53, 69, 125				
262	Cloth red 2B	5, 36, 74, 125		13,751	9,038	.66
267	Neutral gray G	35, 53				
271	Fast acid black R	74				
274	Milling orange G	4, 5, 26, 36	20,341	13,954	7,744	.55
275	Cloth scarlet G	5, 26, 36, 53, X		13,762	14,993	1.09
278	Direct fast red 8BL	4, 5, 26, 35, 53, 125, 200	103,199	97,176	185,582	1.91
280	Scarlet EC	5, 125				
288	Fast cyanine G	4, 35, 74, 125	60,915	52,321	36,238	.69
289	Fast cyanine 5R	4, 35, 53, 74, 125	460,540	448,255	258,387	.58
294	Acid black B	4, 125				
299	Chrome black F	36, 53, 74, 125				
302	Chrome blue green B	4, 53, 74	21,184			
304	Fast acid black N2B	36, 53, 74				
307	Fast cyanine black B	4, 35, 53, 74, 125	263,341	221,141	145,786	.66
308	Naphthylamine black D	53, 74				
315	Naphthol black 2B	44				
316	Developed blue NA	53, 74, 125				
317	Developed blue B	53, 74, 125				
319	Direct fast heliotrope 2B	53, 74				
324	Developed brilliant orange GR.	53, 74, 146				
326	Direct fast scarlet	36, 53, 74, 125	411,295	363,648	358,872	.99
327	Direct fast scarlet 4BS	36, 74				
331	Bismarck brown G	26, 53, 74, 125	60,705	65,218	25,930	.40
332	Bismarck brown R	4, 26, 36, 53, 74, 125	518,848	483,561	182,061	.38
336	Acid chrome black F	5, 74				
343	Chrome fast yellow C	4				
346	Direct fast yellow 5GL	53				
349	Direct fast yellow 4GL	36				

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Colour index no.	Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
				Quantity	Value	Unit value
	CLASSIFIED DYES—Contd.					
	AZO DYES—continued					
	Disazo Dyes—Continued					
			Pounds	*Pounds*		
353	Direct fast pink 2BL	26, 53, 125		13,814	$22,758	$1.65
364	Paper yellow	26, 53, 74, 125	191,509	151,171	110,687	.73
365	Chrysophenine G	53, 74, 125				
370	Congo red	53, 125				
374	Direct orange TA	125				
375	Congo corinth G	4, 5, 26, 53, 125, 200	134,372	138,573	97,528	.70
376	Direct rubine	36, X				
382	Direct scarlet B	4, 5, 26, 36, 74, 125, 200, X.	135,201	105,501	104,622	.99
385	Direct violet	36				
387	Direct violet B	4, 36, 53, 125				
394	Direct violet N	26, 36, 53, 74, 125	73,789	59,707	50,474	.85
395	Developed black RO	5				
401	Developed black BHN	5, 26, 36, 53, 74, 125, 200	1,720,007	1,640,510	555,885	.34
405	Direct cyanine R	125				
406	Direct blue 2B	4, 5, 26, 36, 44, 53, 74, 125, 200.	734,932	801,231	206,891	.26
409	Direct orange DB	53				
410	Chrysamine G	4, 53, X				
411	Cresotine yellow G	26, 36, 125		12,595	6,073	.48
415	Direct orange R	4, 36, 53, 74	85,087	72,872	32,476	.45
419	Direct fast red F	4, 5, 26, 36, 53, 74, 125, 200.	141,765	151,585	103,766	.68
420	Direct brown M	4, 5, 26, 36, 53, 74, 125, 200.	267,982	236,735	128,404	.54
423	Direct brown B	4, 26, 200				
430	Polar red G	36, 53, 125, X				
431	Acid chrome red	53				
436	Direct brilliant red 8B	36				
441	Chrome fast yellow RD	74				
443	Milling red 2G	4, 5, 26, 35, 36, X	2,285	12,323	11,917	.97
446	Direct orange RT	125				
448	Benzopurpurine 4B	36, 53, 125	444,849	403,081	198,275	.49
464	Direct blue R	53				
468	Direct mauve B	125				
471	Direct blue 3R	125				
472	Direct blue BX	36, 53, 125	15,371	18,888	8,352	.44
473	Direct blue G	53				
477	Direct blue 3B	5, 36, 44, 53, 125				
478	Direct orange G	4, 5, 36, 74, 125				
487	Acid milling red B	5, 26, 35, 74, 146	20,310	23,329	21,049	.90
495	Benzopurpurine 10B	36, 53, 125		14,311	11,964	.84
502	Direct azurine G	36, 53, 125	91,149	77,269	52,125	.67
508	Direct brilliant blue G	53				
512	Direct blue RW	5, 36, 53, 74, 125	269,752	265,092	199,044	.75
515	Direct blue B	125				
518	Direct pure blue 6B	5, 36, 53, 74, 125		372,767	302,562	.81
	Trisazo Dyes					
520	Direct pure blue	4, 36, 53, 74, 125	75,768	71,073	37,930	.53
533	Direct fast blue FR	53				
539	Direct fast black FF	4, 36, 53, 74, 125	407,135	345,821	170,690	.49
545	Plutoform black L	35, 74				
552	Diazo black RS	53, 125				
561	Direct brown BT	4, 53, 125, 146				
567	Direct fast blue R	36				
576	Direct fast blue B	36, 53, 125	103,478	97,363	131,265	1.35
577	Direct brown T2G	26				
581	Direct black EW	4, 26, 36, 53, 74, 125, 200	6,237,364	6,492,837	1,740,566	.27
582	Direct black RX	4, 26, 36, 53 74, 125, 200.	558,504	573,139	204,924	.36
583	Direct green ET	4, 5, 26, 36, 53, 74, 125, 200.	38,672	67,913	28,097	.41
589	Chloramine green B	4, 26, 36, 53, 74, 125, 200	84,904	56,710	20,601	.36
590	Direct steel blue G	53				
593	Direct green B	4, 5, 26, 36, 53, 74, 125, 150, 200.	597,667	553,928	191,624	.35
594	Direct green G	4, 36, 53, 200	74,980	58,454	26,670	.46
596	Direct brown 3GO	4, 5, 26, 36, 44, 53, 74, 125, 200.	654,122	619,443	212,860	.34
598	Congo brown G	5, 36, 53, 74, 125, X				
601	Congo brown R	53				

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Colour index no.	Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
				Quantity	Value	Unit value
	CLASSIFIED DYES—Contd.					
	AZO DYES—continued					
	Tetrakisazo Dyes					
			Pounds	*Pounds*		
606	Direct brown G	26, 44, 74, 200	22,686	22,194	$18,724	$0.84
	Total classified azo dyes		28,930,949	27,053,531	12,477,775	.46
	STILBENE DYES					
620	Direct yellow R	4, 36, 53, 125		253,208	90,703	.36
621	Chloramine orange G	4, 26, 53, 125	86,955	82,406	51,905	.63
622	Stilbene yellow	26, 36, 53, 74	235,720			
	PYRAZOLONE DYES					
631	Direct chrysoine G	36				
636	Fast light yellow 2G	5, 53, 74, 125, 146	68,214	63,623	67,437	1.06
639	Fast light yellow	35, 36, 53, 125, 146				
640	Tartrazine	26, 74, 125, 146, X	428,025	449,803	298,473	.66
652	Chrome red B	26, 35, 36, 53, 74, 125		89,755	78,434	.87
653	Pyrazol orange G	5, 125, 146				
654	Developed fast yellow 2G	53				
	Total pyrazolone dyes		795,009	772,809	603,865	.78
	KETONIMINE DYES					
655	Auramine	26, 53, 116, 125	581,351	600,754	512,724	.85
	TRIPHENYLMETHANE AND DIPHENYLNAPHTHYLMETHANE DYES					
657	Malachite green	26, 125				
658	Rhoduline blue 6G	74, 125				
662	Brilliant green	26				
666	Acid green B	26, 36, 53, 74, 125	53,680	60,613	54,664	.90
667	Fast acid green B	26, 74, 125				
670	Acid light green	53, 74				
671	Acid glaucine blue	53, 125				
676	Para fuchsine	8, X				
677	Magenta	26, 36, X				
680	Methyl violet and base	26, 53, 56, 74, 87, 125	698,302	670,179	492,324	.73
681	Crystal violet	53, 74, 125				
682	Ethyl violet	74				
691	Fast green bluish	5				
695	Acid violet 4BN	26				
696	Fast acid violet 10B	53				
698	Acid violet	35, 36, 53, 74, 125	199,678	184,191	174,131	.95
699	Acid fast violet BG	125				
703	Alkali blue 6B	8				
704	Alkali blue	125, X, X				
705	Methyl blue	8				
706	Methyl cotton blue	8				
707	Soluble blue	26, 74, X	52,890	54,588	103,204	1.89
710	Brilliant sky blue 5G	74				
712	Patent blue	74, 125				
714	Patent blue A	74, 125				
720	Eriochrome azurol B	125				
724	Aurine	53				
728	Victoria blue R	53				
729	Victoria blue B	53, 74, 125				
735	Naphthalene green V	53, 125				
737	Wool green S	26, 53, 74	110,562	142,495	76,070	.53
	Total triphenylmethane and diphenylnaphthylmethane dyes.		2,774,669	2,345,530	2,561,703	1.09
	XANTHENE DYES					
749	Rhodamine B	53, 116				
752	Rhodamine 6G	53				
758	Fast acid violet A2R	X				

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Colour index no.	Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
				Quantity	Value	Unit value
	CLASSIFIED DYES—Contd.					
	XANTHENE DYES—continued		*Pounds*	*Pounds*		
759	Acid rosamine A	X				
766	Uranine	5, 26, X				
768	Eosine	5, 8, 26, 97, 125, X	219,070	218,600	$285,816	$1.31
772	Erythrosine	5				
773	Erythrosine B	8, 26				
774	Phloxine B	8				
777	Rose bengale	8				
779	Rose bengale B	26				
	Total xanthene dyes		634,279	567,517	648,032	1.14
	ACRIDINE DYES					
788	Acridine orange A	74, 146				
793	Phosphine	26, 36, 53, 74, 125, 146	100,622	100,908	81,118	.80
794	Phosphine 2G	146				
797	Euchrysine	74				
	QUINOLINE DYES					
801	Quinoline yellow	53, 116, 125				
	THIAZOLE DYES					
812	Primuline	36, 53, 125	113,013	115,483	50,257	.44
813	Direct pure yellow M	53				
814	Direct fast yellow	36, 53, 125, 141	255,537	236,620	217,510	.92
815	Thioflavine T	53				
816	Direct brilliant flavine S	141				
	AZINE DYES					
833	Wool fast blue GL	53, 74, 125				
841	Safranine	26, 53, 125				
860	Induline (spirit-soluble)	26, 74, 125	71,098	70,636	37,702	.53
861	Induline (water-soluble)	26, 74, 125		46,330	33,852	.73
864	Nigrosine (spirit-soluble)	26, 74, 125	926,456	821,401	267,050	.33
865	Nigrosine (water-soluble)	26, 74, 125	1,205,572	1,068,814	387,253	.36
	Total azine dyes		2,502,661	2,238,157	1,000,449	.45
	ANILINE BLACK AND ALLIED DYES					
871	Diphenyl black base	74				
873	New fast gray	26, 53, 146				
875	Fur black	26, 74				
	OXAZINE DYES					
878	Delphine blue B	5, 125				
883	Gallocyanine	26, X				
909	Cotton blue	5, 26, 125	39,174	46,372	61,966	1.34
913	Nile blue BX	74				
	THIAZINE DYES					
922	Methylene blue	26, 53, 74, 125				
924	Methylene green B	26				
926	Thionine blue	26				
927	New methylene blue	26				
965	Melanogen blue B	74				
	SULFIDE DYES					
969	Carbazole vat blue R	53	(1)			
971	Carbazole vat blue G	53	(1)			
	Sulfur black	26, 53, 74, 125	9,790,047	10,664,999	1,758,921	.16
	Sulfur blue	4, 26, 36, 53, 74, 125, X	1,080,885	1,064,256	466,557	.44
	Sulfur brown	4, 5, 26, 36, 46, 53, 74, 125, X	1,317,167	1,272,409	355,185	.28

[1] Totals not included under sulfide dyes. In the dyes classified by method of application, these 2 dyes are included in the vat dyes.

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Colour index no.	Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
				Quantity	Value	Unit value
	CLASSIFIED DYES—Contd.					
	SULFIDE DYES—continued		*Pounds*	*Pounds*		
	Sulfur green	4, 26, 53, 74, 125, X	133,764	147,706	$113,014	$0.77
	Sulfur maroon	4, 53, 74, 125	411,325	449,093	231,904	.52
	Sulfur orange	36, 53, 74, 125		39,272	14,090	.36
	Sulfur tan	4, 26, 36, 53, 74, X	338,264	280,237	77,151	.28
	Sulfur yellow	4, 26, 36, 53, 74, 125, X	160,495	164,876	76,208	.46
	Other	4, 26, 53, 74, 125		132,199	49,294	.37
	Total sulfide dyes		13,441,952	14,215,047	3,142,324	.22
	ANTHRAQUINONE DYES					
1027	Alizarin	5, 26, 125				
1034	Alizarin red S	5, 26, 125		16,283	25,722	1.58
1035	Alizarin brown	125, X				
1037	Alizarin red PS	74				
1040	Alizarin SX	125				
1053	Acid alizarin blue SE	53, 74				
1054	Acid alizarin blue B	53, 74, 125, X	377,028	309,694	539,682	1.74
1059	Anthracene blue WG	14				
1060	Anthracene blue SWGG	14				
1062	Anthracene blue WR	35				
1063	Anthracene blue WRS	14				
1073	Alizarin irisol R	5, 14, 53				
1075	Alizarin astrol B	53, 74				
1076	Cyananthrol R	53				
1078	Alizarin cyanine green E	4, 5, 14, 53, 74, 125, X	54,919	57,306	121,895	2.13
1080	Acid anthraquinone violet B	14, 53				
1085	Anthraquinone blue black B	14, 53, 74, 125, X	123,545	92,924	132,608	1.43
1088	Acid anthraquinone blue B	53, 74, 125				
1091	Acid alizarin rubine	53, 74				
	Total anthraquinone dyes		928,407	792,498	1,292,111	1.63
	ANTHRAQUINONE VAT DYES (SINGLE STRENGTH)					
1095	Anthraquinone vat yellow GC	53, 74				
1096	Anthraquinone vat golden orange G	26, 53, 74, 125	163,121	147,411	209,326	1.42
1097	Anthraquinone vat golden orange R	26, 53, 125				
1098	Anthraquinone vat scarlet G	125				
1099	Anthraquinone vat dark blue BO	5, 26, 53, 74, 125, 141	216,449	169,301	201,112	1.19
1101	Anthraquinone vat jade green	53				
1102	Anthraquinone vat green B and black	26, 53, 74, 125, 141	274,776	328,426	183,408	.56
1104	Anthraquinone vat violet RR	5, 53, 74, 125	189,884	165,937	270,441	1.63
1107	Anthraquinone vat blue RS	53, 74				
1109	Anthraquinone vat blue 3G	53				
1113	Anthraquinone vat blue GCD	5, 53, 74, 125	622,667	619,662	347,468	.56
1114	Anthraquinone vat blue BCS	53, 74, 125	426,895	394,193	487,550	1.24
1115	Anthraquinone vat blue RCD	74				
1118	Anthraquinone vat yellow G	53, 74, 125	245,931	217,977	211,924	.97
1120	Anthraquinone vat brown B	53, 125				
1129	Anthraquinone vat scarlet R	74				
1132	Anthraquinone vat yellow GK	5, 53				
1133	Anthraquinone vat red FF	53				
1134	Anthraquinone vat brilliant violet B	53				
1135	Anthraquinone vat brilliant violet R	53				
1150	Anthraquinone vat olive R	53, 74, 125				
1151	Anthraquinone vat brown R	53, 74, 125				
1152	Anthraquinone vat brown G	53, 74, 125				
1161	Anthraquinone vat red violet RRN	53, 74				

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Colour index no.	Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
				Quantity	Value	Unit value
	CLASSIFIED DYES—Contd.					
	ANTHRAQUINONE VAT DYES (SINGLE STRENGTH)—CON.		*Pounds*	*Pounds*		
1162	Anthraquinone vat red BN	53, 125				
1163	Anthraquinone vat violet BNX.	53				
1169	Anthraquinone vat orange R.	53				
1170	Anthraquinone vat yellow 3G.	53, 141				
1173	Anthraquinone vat blue-green FFB.	125				
	Total anthraquinone vat dyes.		4, 288, 381	4, 158, 870	$4, 834, 488	$1. 16
	INDIGOID AND THIOINDIGOID DYES					
1177	Indigo, synthetic, 20 percent paste.	52, 53, 125	15, 818, 492	16, 120, 738	2, 887, 320	. 18
1178	Indigo white	125				
1180	Indigo extract	53, 125				
1183	Tribromindigo RB	52				
1184	Bromindigo blue 2B, 2BD	52, 125				
1207	Vat red B	53				
1210	Vat brilliant pink R	74				
1212	Vat red 3B	52, 53, 74, 125	80, 164	68, 454	79. 608	1. 16
1217	Vat orange R	26, 53, 74, 125, 144, X	383, 523	378, 455	540, 202	1. 43
1222	Vat violet BR	52, 53				
1228	Vat scarlet G	52				
1229	Vat red R	52				
	FOOD DYES					
22	Yellow AB	57, 125				
61	Yellow OB	57, 125				
80	Ponceau 3R	17, 125, 175, X	38, 632	36, 355	175, 442	4. 83
150	Orange I	17, 125, 175, 192, X	97, 757	92, 850	182, 117	1. 96
184	Amaranth	17, 125, 175, 192, X	76, 253	69, 980	177, 919	2. 54
640	Tartrazine	17, 125, 175, 192, X	73, 774	71, 874	170, 810	2. 38
666	Guinea green B	125, 192				
670	Light green SF (yellowish)	125, 192				
773	Erythrosine	17, 125, 175, X	7, 668	7, 722	118, 601	15. 36
1180	Indigo disulfonic acid	125, 175, X		2, 629	33, 965	12. 92
	Brilliant blue FCF	17, 125, 192		2, 544	24, 737	9. 72
	Fast green FCF	192				
	Ponceau SX	125, 192				
	Sunset yellow FCF	125, 175, 192	9, 628	8, 742	18, 761	2. 15
	Total classified dyes		77, 512, 748	75, 608, 302	34, 288, 623	. 45
	UNCLASSIFIED DYES					
	Acetate silk dyes		1, 187, 255	1, 027, 204	1, 002, 605	. 98
	Blacks (III, IV, IV G)	5, 144				
	Blues (B, 5RB, R supra, III, IV, V, VII, XII, XIII).	4, 5				
	Brilliant cerise	4				
	Brilliant orange (GF conc., 3R conc.).	4				
	Rrilliant red 2B	35				
	Brilliant sky blue G	4				
	Brilliant yellow (G, R, W).	4				
	Cellitazole (AZ, AZN, BN, STN).	74				
	Celliton blue	74				
	Developed black (AS, AD, BA conc., G supra, GA, LF conc., SJ, W, no. 99).	4, 35, 53, X				
	Direct blue	4				
	Direct yellow GA	35				
	Fast orange 2R supra	4				

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
UNCLASSIFIED DYES—CON.					
Acetate silk dyes—Continued		*Pounds*	*Pounds*		
Fast red Y	4				
Golden orange (I, III)	5				
Golden yellow (F, FSI, VIII, IX, XI, XII, XIII)	4, 5				
Heliotrope I	5				
Light orange FSI	5				
Navy blue B	5				
Orange (JER, I, II, III)	4, 5				
Pink II	5				
Pure yellow (I, II)	5				
Red (R, I, III, IV, V, VII, X)	4, 5				
Violet II	5				
Yellow C	4				
Acid alizarin green B	X				
Acid anthracene brown PG	74				
Acid anthracene yellow GR ex.	35				
Acid anthraquinone blue (A2G, AR, GS, 3G, BGA, SWB, WSA, supra)	53, 74, 125				
Acid black (AR, BG, 8B, 8BN, DB, 3G, GRF, J, NBJ, NCB, RB, 64C)	5, 26, 44, 53, 74, 125, X	124,598	124,011	$63,649	$0.51
Acid blue (CBF, L)	5, 26, 53, 146		3,158	4,025	1.27
Acid brilliant blue (3B, 2R)	5, 53				
Acid brilliant red (5B, 4BL, G)	5, 53, 125				
Acid brown (FN, N, R conc., Y)	4, 26, 146, X	8,093	7,266	8,232	1.13
Acid chrome blue (2RA, RR)	36, 74				
Acid fast black (BBN, 773)	44, 53				
Acid fast blue IB	53				
Acid fast brown CGS	53				
Acid fast green 10G	53				
Acid fast orange LW	5				
Acid fast red (BL, BW)	5, 26				
Acid fast yellow RS	5				
Acid green GR	146				
Acid light red 4BL	53				
Acid light rubine BL	74				
Acid milling brown R supra	5				
Acid milling red R	36				
Acid milling yellow (G, 2GX)	36, 146				
Acid navy blue (B, conc., M4B)	5, 26, 53, X				
Acid orange (2R, 4R, YF)	26, 146				
Acid Red (3B, OA)	36, 146				
Acid scarlet G	146				
Acid sapphire G	X				
Acid violet (B, RL, 2RX)	26, 36, 146				
Acid wool blue BL	53				
Acid yellow (conc., 2G, R)	26, 146				
Alizarin (IT, L)	5				
Alkali fast green 10G	74				
Alkali violet B conc	26				
Anthra yellow GD	74				
Anthracene blue SWN	125				
Anthracene chrome brown RL	X				
Anthraquinone vat black J	125				
Anthraquinone vat blue (3BCS, CLX, RCL, RCX, RS)	5, 53, 74				
Anthraquinone vat blue green (FFB, Y)	53, 74				
Anthraquinone vat brilliant blue RCL	74				
Anthraquinone vat brilliant green (BG, BN)	74				
Anthraquinone vat brilliant orange RK	74				
Anthraquinone vat brilliant pink B	74				

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Colour index no.	Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
				Quantity	Value	Unit value
	UNCLASSIFIED DYES—Con.		*Pounds*	*Pounds*		
	Anthraquinone vat brilliant violet (3B, 4R).	74				
	Anthraquinone vat brown (G, GG, RR, RT).	53, 74				
	Anthraquinone vat black 3G.	53				
	Anthraquinone vat flavine GC.	125				
	Anthraquinone vat golden orange 3G.	74				
	Anthraquinone vat golden yellow (GK, GOW).	74				
	Anthraquinone vat green (G, GG, GGF, IBW).	74				
	Anthraquinone vat khaki (GG).	53, 74				
	Anthraquinone vat navy blue (BN, G).	5, 26, 53	74, 142	61, 073	$72, 046	$1. 18
	Anthraquinone vat olive GN.	74				
	Anthraquinone vat orange RRT.	74				
	Anthraquinone vat printing brown D ex.	74				
	Anthraquinone vat printing green (B suprafix, BG suprafix).	74				
	Anthraquinone vat printing red B.	74				
	Anthraquinone vat red violet 3CRH.	74				
	Anthraquinone vat scarlet (3B, GGN).	74				
	Anthraquinone vat yellow (4G, 8G, PG).	53, 74				
	Anthraquinone vat yellow brown 3G.	74				
	Artificial silk black G	36				
	Azo Bordeaux 2BL	146				
	Azo brilliant red 7BL	146				
	Azo eosine 2B	53				
	Azo fast blue (B, G, 2R)	125				
	Azo fast violet	125				
	Azo oil black	125				
	Azo orange	146				
	Azo red F	4				
	Azo scarlet G	146				
	Azo violet (BS, 2B)	4				
	Azo xylene azo (N 1700, b-naphthol).	26				
	Bis benzene diazo a-naphthol.	26				
	Bis xylene diazo a-naphthol.	26				
	Brilliant acid blue 3BP	146				
	Brilliant benzo violet B	53				
	Brilliant black S	125				
	Brilliant milling blue B	53, 74				
	Brilliant milling green B conc.	53				
	Brilliant wool blue (FFR, G ex., N).	74, 125				
	Celanthrene black	53				
	Celanthrene blue G	53				
	Celanthrene brilliant blue conc.	53				
	Celanthrene brilliant red conc.	53				
	Celanthrene brown (AN, LRN, BR, Y).	53				
	Celanthrene fast light yellow conc., GL.	53				
	Celanthrene navy blue (BN, CB, CBR, CB conc., CBR conc., R conc.).	53				
	Celanthrene orange ex conc.	53				
	Celanthrene pure blue (BR, BR conc.).	53				
	Celanthrene purple conc.	53				
	Celanthrene red Y conc.	53				

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
UNCLASSIFIED DYES—Con.		*Pounds*	*Pounds*		
Celanthrene red violet R conc.	53				
Celanthrene sky blue (B, B conc., BR conc.).	53				
Celanthrene violet CB	53				
Ceresine	26				
Chromate blue black B	36				
Chromate brilliant brown RL.	35				
Chromate brown (BC, EB, EBR, EBS conc.).	4, 26, 35, 53, 74, X	90, 146	99, 661	$80, 932	$0. 81
Chromate red 2G	X				
Chrome black (3G, NSE, SW).	4, 53, 125				
Chrome blue ATX	53				
Chrome brilliant orange, 2R	5				
Chrome brown (B, 3B, EB, G, O, PG, RR).	5, 36, 53, 125, 146	107, 161	105, 674	99, 276	.94
Chrome fast garnet R	36				
Chrome gray DG	125				
Chrome green (B, CB, G, SN).	4, 36, 125				
Chrome orange 3B	125				
Chrome yellow (DS, 2G, 3G, 5G, SS, SW, YYFP).	4, 26, 36, 53, 74, 125	77, 400	60, 748	23, 700	.39
Chromogene black T supra	74				
Chromoxane cyanine R	74				
Chromoxane pure blue B	74				
Cloth red (R, 2R)	125				
Copper blue 2RX	4				
Croceine scarlet FP conc	125				
Developed black (2BN, G, OB, OT, ZV conc.).	36, 53, 74, 125	130, 017	121, 571	64, 847	.53
Developed blue (B, BR, 5GL).	36, 53, 125				
Developed Bordeaux (7B, 2BL, RB, 7B conc.).	53, 125				
Developed brilliant green 3G	74				
Developed brilliant scarlet (2BL, 5BL, RO).	4, 53, 74				
Developed brown (6G, NR, R, 3RB).	53, 74				
Developed dark brown MB	4				
Developed fast blue (B, 2RW)	36				
Developed fast brown RK	53				
Developed fast violet BL	53				
Developed fast red 7BL	53				
Developed fast yellow GG	74				
Developed green (BL, 2GL)	53				
Developed indigo blue (4GL, 4RL).	4, 53, 74				
Developed orange (RR, WD)	53, 125				
Developed rubine B	74				
Developed scarlet (A, R)	125				
Developed seal brown	X				
Developed sky blue (B, 3GL)	74				
Developed violet RR	53				
Diamond black F	4				
Direct black (CSW, 3G, 3GR, NCW).	4, 26, 36, 125, X				
Direct blue (FF, NR)	53, 125				
Direct Bordeaux (B, 6B)	5, 74, 125				
Direct brilliant green BB	5				
Direct brilliant red 12B	125				
Direct brown (CSW, CN, FW, GB, 3G, G2R, G3R, K, R, RY, S).	4, 26, 36, 44, 125, X	128, 006	104, 174	72, 429	.70
Direct catechines (G)	53, 125				
Direct catechine brown (GG, GR, GS).	5				
Direct chrome black blue B	4				
Direct chrome brown BS	4				
Direct copper blue RRX	53				
Direct fast black (B, FTC, G, L, L conc., PG ex.).	4, 5, 36, 53, 74, 125, 200	230, 173	256, 586	196, 502	.77

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
UNCLASSIFIED DYES—Con.					
		Pounds	*Pounds*		
Direct fast blue (FF, 2GL, 4GL, 8GL, LBRR, LG, R, RL, SRL)	4, 36, 53, 74, 125	144,787	100,770	$119,494	$1.19
Direct fast brown (4GL, LBR, LG, L3R, R, 4R, RL, 2RL, 4RL, 3YL)	53, 74, 125				
Direct fast gray (BL, 2GL, M, R)	53, 74, 125				
Direct fast light blue FF	36				
Direct fast olive brown RL	5				
Direct fast orange (EG, E3G, ER, G, 2G conc., 2GL, 4G, L3R, L5G, L7G, R, RE, 2R, 6R, 7R, S)	26, 35, 36, 53, 74, 125, X	171,826	142,104	164,376	1.16
Direct fast red (4B, 5BL, 8BLN)	4, 36, 74, 125	99,953	86,656	118,812	1.37
Direct fast rubine B, conc	125				
Direct fast scarlet (8BA, 4BS)	4				
Direct fast violet (2B, F, SRL)	4, 53, 74				
Direct fast yellow (4GL, 5GL, LR, L2R, L5G, RL)	4, 36, 53, 74, 125	139,527	94,793	143,184	1.51
Direct garnet R	36				
Direct gray (BBC, G, Z)	44, X				
Direct green (54FS, 5G, 2Y)	4, 53				
Direct green black	36				
Direct light brown (GR, 4YL)	53				
Direct light yellow RL	36				
Direct navy RY	200				
Direct navy blue (4B, DB, R)	4, 26, 53, X		69,890	47,604	.68
Direct orange (GL, 2R)	4, 35				
Direct red (B, 3B)	36				
Direct rhodoline red B	53				
Direct sapphire B	X				
Direct scarlet S	26				
Direct violet BB	125				
Direct violet black	36				
Discharge brown RB	53				
Dressing jet black	74				
Fast acid black (BR, BRA, F)	4, 74				
Fast acid blue (CM, R)	74				
Fast acid Bordeaux B	74				
Fast acid gray	125				
Fast acid light red B	36				
Fast acid red (3B, BL, GG)	53, 74				
Fast acid violet (ERR ex, VR)	53, 146				
Fast acid yellow R	74				
Fast black (G, V)	53, 125				
Fast crimson R	125				
Fast lake blue B	125				
Fast light red (B, 4B)	74				
Fast light violet	X				
Fast light yellow (D3G, E2G)	74				
Fast silk red RT	4				
Fast silk yellow G	4				
Fast wool black GRF conc	125				
Fast wool red (BL, GL)	125				
Fast wool violet B	125				
Formal fast black G	4, 36				
Formanol black RW	X				
Gas yellow	26				
Hansa yellow (G)	53, 74				
Helio fast rubine 4BL	74				
Helio red RMT extra	74				
Indamine navy blue 2B	4				
Indigo vat brown G	125				
Indigo vat pink (FB, FF)	26, 53, 125, 144, X	255,589	209,716	269,242	1.28
Indigo vat scarlet 2GN	125				
Indocyanine B	74				
Ink blue (BJT, BN)	74				
Jet black APX	53				

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
UNCLASSIFIED DYES—Con.		*Pounds*	*Pounds*		
Lake orange	26				
Lake pink RL	125				
Lake red	26				
Lake scarlet G	5				
Leather dark brown	44				
Lithosol blue G	53				
Lithosol fast blue (BL conc., 6G).	53				
Lithosol fast yellow 10G	53				
Methyl violet B2R	74				
Milling fast garnet R	35				
Milling fast yellow 5GL	35				
Milling orange (G, R)	53, 125, 146				
Milling red (B, R)	125				
Milling yellow (3G, GN, O conc., R).	26, 53, 125, 146	28,387	22,243	$25,346	$1.14
Naphthogene blue 2R	4				
Naphthylamine black V	53				
Neotolyl black	4				
Neutral brown RX	4				
Neutral red G	4				
Nigrosine base (B, N, R, 2R)	125				
Oil blue	X				
Oil brown (D, M, Y)	60, 125				
Oil fast orange A	125				
Oil fast red M	125				
Oil fast yellow 3G	125				
Oil green	X				
Oil orange (RR, Y, no. 30)	44, 69				
Oil orange brown	69				
Oil pink B	125				
Oil red (BTB, EG, G, O, OB, RO, Y, 322).	5, 26, 44, 69, 125	47,228	35,003	36,148	1.03
Oil scarlet	26				
Oil soluble blue	4				
Oil violet	X				
Oil yellow (PHW)	26, X				
Oil yellow N	53				
Olive brown G	26				
Paper red AD	74				
Patent blue B conc	125				
Pharmasol blue GN	146				
Pharmasol scarlet RR	146				
Pharmasol yellow (G, GN)	146				
Pharmol blue B	146				
Pharmol yellow	146				
Phenoform orange G	74				
Pigment fast orange RDO	74				
Pigment red	4				
Polar orange (GS, R)	36				
Polar red (B, 3B, G)	4, 36				
Polar yellow (2G, 5G, R)	36				
Printing violet R	125				
Quinoline yellow KT	X				
Rapid printing orange	144				
Rapid printing red	144				
Rapid printing scarlet	144				
Rayon black (B, MS)	53				
Rayon Bordeaux (B, 3B)	53				
Rayon brown (G, M)	53				
Rayon navy blue N	53				
Rayon violet (3B, 4R)	53				
Resin brown Z	125				
Resin brilliant orange RR	125				
Resin brilliant red R	125				
Resin brilliant scarlet 6G	125				
Resin violet B	125				
Resorcin brown (R, YX)	36, 44				
Rhodamine 6 GDN	X				
Rhoduline blue 5B	74				
Rosanthrene (A, R)	53				
Rosanthrene orange	53				
Roto orange IT	74				
Roto red IPI	74				
Rubber colors	53				

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
UNCLASSIFIED DYES—Con.		*Pounds*	*Pounds*		
Safranine 8B	125				
Silk brown (B, G, GN, R)	36, X				
Silk fast blue (3G, 10G)	53				
Silk red (2B, 10B)	X				
Silk white blue O	74				
Sudan brown 5B	74				
Sudan corinth B	74				
Sudan red BB	74				
Sulfon cyanine BB	74				
Sulfon orange G	74				
Sulfon yellow R	74				
Sulfur navy blue 3B	5				
Supranol red (PBX, PG, PRX, R)	74				
Toluene azo b-naphthol	26				
Universal black	74				
Victoria pure blue (BG, BO)	74				
Wool blue CG	125				
Wool green B	125				
Wool fast orange G	74				
Wool navy blue B	125				
Wool red special	146				
Xylene yellow	26				
Zambesi black (BG, D, PC, V)	36, 74, 125				
All other	35, 53, 74, 125, X				
Total unclassified dyes		9,664,864	8,700,743	$8,961,992	$1.03
Grand total of dyes		87,177,612	84,309,045	43,250,615	.51
COLOR LAKES					
Black lakes	41, 103, 117, X, X, X, X, X.	66,555	69,035	45,850	.66
Blue lakes	23, 26, 29, 41, 67, 87, 99, 103, 105, 107, 117, 169, 176, 184, 198, X, X, X, X, X, X, X, X, X, X, X, X, X.	1,104,172	1,040,310	945,162	.91
Eosine lakes	23, 29, 67, 97, 103, 105, 107, 117, 169, 176, 184, X, X, X, X, X, X, X, X, X, X, X.	300,595	305,292	352,351	1.15
Green lakes	2, 23, 29, 41, 67, 87, 97, 103, 105, 107, 117, 148, 169, 184, 198, X, X, X, X, X, X, X, X, X, X, X, X, X, X.	302,130	302,135	338,627	1.12
Lithol red lakes	23, 29, 41, 67, 87, 97, 99, 103, 105, 107, 117, 148, 169, 184, 198, X, X, X, X, X, X, X, X, X, X, X.	897,406	824,029	535,064	.65
Maroon lakes	2, 23, 29, 67, 87, 99, 103, 105, 107, 121, 148, 169, 184, 198, X, X, X, X, X, X, X, X, X, X.	526,789	526,438	453,324	.86
Orange lakes	23, 29, 41, 67, 97, 99, 103, 107, 117, 146, 148, 169, 176, 198, X, X, X, X, X, X, X, X, X, X, X, X, X.	504,655	475,864	217,128	.46
Para red lakes	2, 23, 29, 87, 97, 99, 103, 105, 107, 117, 148, 169, 184, 198, X, X, X, X, X, X, X, X, X, X, X, X, X, X, X.	1,387,690	1,359,780	684,358	.50
Red lakes	23, 29, 41, 67, 87, 99, 103, 105, 107, 117, 121, 148, 169, 176, 184, 198, X, X, X, X, X, X, X, X, X, X, X, X, X.	1,658,631	1,646,420	1,330,772	.81

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
COLOR LAKES—Continued					
		Pounds	*Pounds*		
Scarlet lakes	2, 23, 29, 67, 87, 99, 103, 105, 107, 148, 169, 184, X, X, X, X, X, X, X, X, X.	414,772	389,558	$162,094	$0.42
Violet lakes	23, 26, 29, 41, 56, 67, 87, 97, 103, 107, 117, 169, 176, 184, 198, X, X, X, X, X, X, X, X, X, X.	438,834	406,438	331,779	.82
Yellow lakes	29, 41, 67, 87, 97, 103, 105, 117, 169, 176, 198, X, X, X, X, X, X, X, X, X, X, X.	395,443	379,800	285,447	.75
Other lakes	29, 67, 103, 117, 198, X, X, X, X.	117,193	114,463	123,151	1.08
Total color lakes		8,114,865	7,839,562	5,805,107	.74
PHOTOGRAPHIC CHEMICALS					
Catechol (pyrocatechin)	142				
Diaminophenol hydrochloride (amidol)	X				
Hydroquinol	31, 53, 59, 190, X	647,892	614,784	454,744	.74
p-Hydroxy phenylglycine	59, X				
Methyl p-aminophenol sulfate (metol) (rhodol)	53, 59, 196, X	135,209	136,219	389,997	2.86
Total photographic chemicals		996,052	829,002	957,508	1.16
MEDICINALS					
Acetanilide, USP	52, 120, 124, 136, X	445,725	454,255	89,479	.20
Acetphenetidin	52, 124				
Acetyl-p-aminophenyl salicylate (salophen)	X				
Acetyl salicylic acid (aspirin)	52, 124, X, X	3,791,117	3,570,731	2,033,240	.57
Ambazin	125				
p-Aminobenzoyldiethylaminoethanol (procaine)	1, 135, X, X	9,003	9,538	242,518	25.43
p-Aminobenzoyldimethylaminomethyl butanol hydrochloride (tutocain)	X				
m-Amino-p-hydroxyphenylarsine oxide hydrochloride (mapharsen)	X				
Aminopyrine. (See 4-Dimethylamino antipyrine.)					
Antipyrine	52				
Arsphenamine	1, 50, 114, X, X, X	426	256	35,448	138.47
Aspirin. (See Acetyl salicylic acid.)					
Barbituric acid derivatives:					
Cyclohexenylmethylmethyl barbituric acid	X				
Cyclohexenylmethylmethyl sodium barbiturate	X				
Phenobarbital	1, 20, 114, X, X, X	63,762	67,756	403,713	5.96
Phenylethylmethyl barbituric acid	X				
Benzaldehyde, USP	84, 186, X				
Benzocaine. (See Ethyl-p-aminobenzoate.)					
Benzoic acid, USP	31, 53, 88, 124				
Benzoyl-tetramethyldiamino-ethylisopropanol hydrochloride	X				
Benzyl succinate	163, X				
Bismuth betanaphthol	128, X				
Bismuth tribromophenol	X				
Borocaine. (See Ethocaine borate.)					

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
MEDICINALS—Continued		*Pounds*	*Pounds*		
m-Bromoaceto phenyl benzoate (neoxyn)	52				
Caffeine sodium benzoate	114, 128, 163				
Calcium cresol sulfonate	X				
Calcium iodoxybenzoate	X				
Chloramine T. (See Sodium-p-toluene sulfochloramides.)					
Cinchophen. (See 2-Phenylquinoline-4-carboxylic-acid.)					
m-Cresyl acetate (cresatin)	164				
Dibenzyl succinate	163				
n-Diethylaminoisopentyl-8-amino-6-methoxy quinoline	X				
4-Dimethylamino antipyrine (aminopyrine)(ampydin)	125, X				
Disodiumhydroxymercurisalicyloxy acetate (mercurosal)	X				
Ethocaine borate (borocaine)	164				
Ethyl-p-aminobenzoate(benzocaine) (anesthesine)	1, 20, 135, X, X, X, X	8,664	6,943	$29,170	$4.20
Formidine. (See Methylene disalicylic acid derivative.)					
Gamma-diethylaminopropylcinnamate hydrochloride (apothesine)	X				
Guaiacol (liquid)	84, 120, 124				
Hexylresorcinol	X				
8-Hydroxyquinoline	20				
8-Hydroxyquinoline sulfonic acid	20				
o-Iodobenzoic acid	1, 59				
Iodoxyquinoline sulfonic acid (yatren acid)	20, X				
Lithium benzoate	120				
Magnesium salicylate	52, 84, 114				
Medicinal dyes, total		51,860	53,717	1,111,611	20.69
Acriviolet	125				
Brilliant green	125				
3:6-Diamino acridine sulfate (proflavine)	1, 125				
3:6-Diamino-10-methyl acridine chloride (acriflavine)	1, 125				
Dibromohydroxymercurifluorescein sodium salt (mercurochrome)	90				
Gentian violet	125				
Hexalet	X				
Methylene blue, USP	26				
Methyl violet	125				
Parafuchsine	125				
Phenolsulfonphthalein	20, 90				
Phenylazo-diamino pyridine hydrochloride (pyridium)	152				
Scarlet red	125				
Stovarsol	X				
Sulfosalicylic acid	59, X				
Theocalcin	X				
Trypan blue	125				
Trypan red	125				
Tryparsamide	X				
Mercury m-cresol	X				
2-Methoxy-6-chloro-9-diethylaminopentyl amino acridine	X				
m-Methylaminoethanolphenol hydrochloride (neosynephrin)	X				
Methyl m-amino-p-hydroxybenzoate (orthoform)	X				

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
MEDICINALS—Continued		*Pounds*	*Pounds*		
Methylene citrylsalicylic acid	X				
Methylene disalicylic acid derivative (formidine)	X				
p-Methylphenyl cinchoninic ethyl ester (neocinchophen)	1, 20, 26	4,744	4,850	$68,411	$14.10
Neoarsphenamine	1, 50, 114, X, X, X	5,619	4,985	816,010	163.69
Phenobarbital. (See Barbituric acid derivatives.)					
Phenolphthalein	124, X, X				
Phenolsulfonates (calcium, sodium, zinc, etc.)	114, X				
Phenylethylmalonylurea, sodium	X				
Phenyl isocyanate	59				
b-Phenyl isopropyl amine	X				
Phenyl mercuric nitrate	60				
2-Phenylquinoline-4-carboxylic acid (cinchophen) (phenyl cinchoninic acid).	1, 20, 26				
Procaine. (See p-Aminobenzoyldiethylaminoethanol.)					
Pyramidon and trichloroethyl alcohol urethane compounds	X				
Resorcinol, USP	53, 142				
Resorcinol monoacetate	59, 163				
Salicylic acid, USP	52, 84, 124	2,438,226	1,235,503	466,088	.38
Salol	52				
Salophen. (See Acetyl-p-aminophenyl salicylate.)					
Silver arsphenamine	1, X				
Sodium o-iodohippurate	114				
Sodium phenyldimethylpyrazolone methylaminomethane sulfonate	X				
Sodium salicylate	52, 84, 124	457,475	410,740	151,268	.37
Sodium p-toluene sulfochloramide (chloramine T)	124				
Strontium salicylate	52, 84, 114				
Sulfoarsphenamine	1, 114, X, X, X	347	260	56,317	216.60
Tetraiodophenolphthalein, sodium salt (iodeikon) (antinosin)	20, 59, 114, 125				
Theobromine and sodium salicylate	114, 128				
p-Toluene sulfodichloramide (dichloramine T)	124				
All other medicinals	1				
Total medicinals		10,023,626	8,224,416	7,921,529	.96
FLAVORS					
Cinnamyl isobutyrate	X				
Coumarin	52, 53, 68, 120, 124	137,332	123,406	316,017	2.56
Ethyl benzoate	68, 134, 186, X, X	2,815	1,530	1,474	.96
Ethyl cinnamate	68, 72				
Ethyl salicylate	52, 68				
Ethyl vanillin	120, 124, X				
Methyl cinnamate	72, X				
Methyl salicylate	52, 84, 124	1,268,989	1,239,388	386,655	.31
Saccharin	124				
Vanillin	120, 124, X, X, X	232,920	248,819	835,952	3.36
Total flavors		1,903,132	1,812,234	1,928,892	1.06
PERFUME MATERIALS					
Acetophenone	68, 72, 98, X, X	6,686	8,292	8,216	.99
Amyl benzoate	186				
Amyl cinnamate	186				
Amyl cinnamic aldehyde	68, 186, X, X, X, X	42,253	42,474	87,505	2.06
Amyl salicylate	68, 118, 168, X, X				
Benzal glycerin	X				

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
PERFUME MATERIALS—Con.		*Pounds*	*Pounds*		
Benzophenone	53, 68, 72, 98, 186, X, X	34,291	31,491	$32,782	$1.04
Benzyl acetate	68, 98, 168, X				
Benzyl alcohol	68, 88, 98, 168, X		103,839	53,926	.52
Benzyl benzoate	68, 98, 168, X				
Benzyl butyrate	68, X				
Benzyl cinnamate	68, X				
Benzyl formate	X				
Benzyl isoeugenol	68, 189				
Benzyl propionate	68, 118, X, X				
Benzyl salicylate	68, 189, X				
Benzyl valerate	68, X				
Cinnamic acid	72, X				
Cinnamic alcohol	68, 72				
Cinnamic aldehyde	68, X, X, X	15,868	8,520	14,714	1.73
Cinnamyl propionate	X				
Cinnamyl valerianate	X				
p-Cresyl acetate	68, 72, X				
p-Cresyl methyl ether	72				
p-Cresylphenyl acetate	68				
Diamyl phthalate	X, X				
Diethyl phthalate	98, 186, X, X, X	879,474	726,649	140,895	.19
Dimethyl acetal phenylacetaldehyde	X				
Dimethylanthranilate	68, X				
Dimethylbenzyl carbinol	68, 186				
Dimethyl hydroquinone	53, 68				
Dimethyl phthalate	98, X, X, X	302,062	326,190	68,287	.21
Diphenyl ethyl ether	186				
Diphenylmethane	X				
Diphenyl oxide	52, 68, X				
Ethyl anthranilate	68, X				
Ethylmethylphenyl glycidate	X				
p-Hydroxy benzoic acid esters (aseptoform)	X				
Isobutyl anthranilate	68				
Isobutyl benzoate	186				
Isobutyl indol	68				
Isobutylphenyl acetate	68, X				
Isobutyl salicylate	68, X				
Linalyl anthranilate	68, 189				
Linalyl benzoate	189				
Linalyl cinnamate	189				
Methyl acetophenone	68, 72, 98, X				
Methyl anthranilate	52				
Methyl benzoate	72, 88, 118, 134, 186, X, X				
Methyl p-cresol	68, 118, X				
Methyl naphthyl ketone	X				
Methylphenyl acetate	68, 72, X, X		744	1,316	1.77
Methylphenyl carbinol	72				
Methylphenyl carbinyl acetate	72				
Musk ambrette	53, 118, X, X	12,208	10,904	54,992	5.04
Musk ketone	53, 118, X, X	9,834	6,888	37,706	5.47
Musk xylol	53, 118, X, X	34,392	32,871	48,979	1.49
b-Naphthyl ethyl ether (nerolin)	72, 98				
b-Naphthyl methyl ether (yara yara)	72, 98				
Phenylacetic acid	72, 98				
Phenylacetic aldehyde	72				
Phenylacetic ketone	68				
Phenylethyl acetate	1, 68, 98, 186, X, X				
Phenylethyl alcohol	52, 68, 98, 186, X	126,144	124,671	291,086	2.33
Phenylethyl anthranilate	189				
Phenylethyl butyrate	68, X				
Phenylethylphenyl acetate	68				
Phenylethyl salicylate	53, 189				
Phenylethyl valerianate	X				
Phenylethylene styrene	72				
Phenylpropyl acetate	186				
Phenylpropyl propionate	186				
Prophenyl guaethol	X				
Total perfume materials		2,264,774	1,883,195	1,098,971	.58

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
RESINS					
Derived from—		*Pounds*	*Pounds*		
Coumarone and indene	16, 127, X				
Cresol and/or phenol	10, 15, 45, 55, 63, 113, 139, 154, 158, 179, 193, X, X, X, X, X, X, X, X, X, X.	10,886,599	8,091,475	$1,705,453	$0.21
Phenol:					
Cast	11, 32, 33, 34, 54, 66, 96, 102, 115, 131.	4,968,445	4,793,658	2,099,035	.44
Other	15, 18, 28, 38, 39, 42, 45, 48, 55, 63, 154, 155, 162, X, X, X, X, X, X, X, X, X.	24,808,521	23,200,875	5,233,373	.23
Phthalic anhydride	7, 18, 53, 148, X, X, X, X, X, X.	15,219,247	7,084,602	1,022,436	.14
Maleic acid	28, 83, 154	176,677	180,266	66,552	.37
Styrol	X				
Xylenol	X				
Sulfonamide (santolites)	124				
Total[1]		56,059,489	43,350,876	10,126,849	.23
MISCELLANEOUS COAL-TAR PRODUCTS					
Benzoate of ammonia	88, 124				
Benzoate of soda	31, 52, 53, 88, 124				
Benzoyl peroxide	X				
Biological stains and chemical indicators.	40, 106, 125, 178				
Cresophan	X				
Diazo salts:					
Fast black salt B	125				
Fast blue salt B	74				
Fast blue salt BB	74				
Fast blue salt BN	125				
Fast Bordeaux salt GP	74				
Fast orange salt GC	74, 125				
Fast red salt AL	125				
Fast red salt B	74, 125				
Fast red salt G	125				
Fast red salt 3G	125				
Fast red salt GL	74				
Fast red salt 3GL	74				
Fast red salt TR	125				
Fast scarlet salt GG	74, 125				
Fast scarlet salt R	74, 125				
Gases (poisonous, tear, etc.):					
Chloroacetophenone	26, 178				
Chloropicrin	12, X				
Diphenylamine chlorarsine.	142				
Hexalin	53				
Insecticides, synthetic	X				
Methyl hexalin	53				
Naphthanil red for printing	53				
Naphthanil scarlet for printing.	53				
Naphthol AS series, total		497,058	409,519	733,127	1.79
Naphthol AS	5, 74, 125				
Naphthol AS, BO	74				
Naphthol AS, BS	53, 74, 125				
Naphthol AS, BR	74				
Naphthol AS, D	5, 74, 125				
Naphthol AS, OL	74				
Naphthol AS, PH	74				
Naphthol AS, RL	74				
Naphthol AS, SW	5, 74, 125				
Phthalyl glycolate plasticisers (Santasizers).	124				
Printsol colors:					
Bordeaux R	125				
Red G	125				
Scarlet B, GG	125				

[1] Does not include resins from coumarone and indene, and sulfonamide.

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TABLE 8.—*Dyes and other finished coal-tar products: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
MISCELLANEOUS COAL-TAR PRODUCTS—Continued		*Pounds*	*Pounds*		
Quinhydrone	59, X				
Rapid fast colors:					
Orange G, RH	53, 74				
Red G, GL	74				
Red GZH	74				
Red RH	53, 74				
Scarlet GG, ILH	53, 74				
Rapidogene colors:					
Blue BN	53, 74				
Blue R	74				
Brown IB	74				
G dbl	74				
Orange G	74				
Red G	53, 74				
Red GS	74				
Red R	74				
Scarlet R	53, 74				
Scarlet RS	74				
Yellow G	53, 74				
Yellow GG	74				
Yellow GS	74				
Research chemicals	6, 59				
Synthetic tanning materials	7, 16, 36, 74, 123, 129, X				
Tetrahydronaphthalene (tetralin)	53				
Textile assistants, total		1,554,600	1,454,495	$402,031	$0.28
Alkanola	53				
Areskap	X				
Aresket	X				
Aresklene	X				
Celascour	5				
Cerols	36				
Cominol GAR	44				
Eunaphthol AS	74				
Gold medal penetrator	44				
Hydralin	53				
Hydropthol	53				
Immersol	X				
Isomerpin	53				
Isopan	53				
Isopropyl naphthalene sulfonic acid	125				
Kollamine A	74				
Ludigol	74				
Merpentine	53				
Nekal A	74				
Nekal BX	74				
Neomerpins	53				
Penetrant paste and powder	4				
Potts emulsifier	53				
Soapotol GAR	44				
Sulfonated naphthalenes	X				
Tensol paste	177				
Other miscellaneous	53				
Total miscellaneous coal-tar products		20,442,360	19,383,947	5,124,762	.26

PRODUCTION OF DYES BY CLASSES OF APPLICATION

Dyes produced in the United States in 1934, classified according to method of application, were: (1) Acid dyes, (2) basic dyes, (3) direct dyes, (4) acetate silk dyes, (5) lake and spirit-soluble dyes, (6) mordant and chrome dyes, (7) sulfur dyes, and (8) vat dyes, subdivided into indigo and other vats. The classification of a dye in any one of these groups must necessarily be arbitrary in certain instances, because a dye may have properties which permit of its application by more than one method.

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TABLE 9.—*Comparison of United States production and sales of dyes by classes of application, 1925–30, 1933, and 1934*

Class of application	Production					
	Quantity			Percent of total		
	1925–30 average	1933	1934	1925–30 average	1933	1934
	Pounds	*Pounds*	*Pounds*			
Acid	11,813,941	11,999,772	11,635,651	12.57	11.89	13.35
Basic	4,833,382	4,645,550	4,380,981	5.14	4.60	5.02
Direct	17,983,751	21,704,072	21,263,095	19.13	21.50	24.39
Acetate silk			1,187,255			1.36
Lake and spirit-soluble	1,947,124	3,209,242	3,580,534	2.07	3.18	4.11
Mordant and chrome	3,611,608	5,318,385	4,154,390	3.84	5.27	4.77
Sulfur	20,004,635	20,188,008	13,441,952	21.28	20.00	15.42
Vats (including indigo)	33,221,072	33,093,422	26,963,234	35.34	32.78	30.93
(*a*) Indigo	27,128,311	23,412,400	15,818,492	28.86	23.19	18.15
(*b*) Other	6,092,761	9,681,022	11,144,742	6.48	9.59	12.78
Unclassified	587,657	794,327	570,520	.63	.78	.65
Total	94,003,170	100,952,778	87,177,612	100.00	100.00	100.00

Class of application	Sales					
	Quantity			Percent of total		
	1925–30 average	1933	1934	1925–30 average	1933	1934
	Pounds	*Pounds*	*Pounds*			
Acid	11,609,667	11,923,201	10,481,882	12.69	12.14	12.43
Basic	4,709,926	4,415,487	4,096,744	5.11	4.49	4.86
Direct	17,580,927	21,674,210	20,601,475	19.07	22.06	24.44
Acetate silk			1,027,204			1.21
Lake and spirit-soluble	1,896,821	2,951,979	3,082,112	2.06	3.00	3.66
Mordant and chrome	3,558,732	5,468,641	3,397,155	3.86	5.57	4.03
Sulfur	19,810,565	18,989,801	14,215,259	21.48	19.33	16.86
Vats (including indigo)	32,429,018	32,042,801	26,846,964	35.17	32.62	31.84
(*a*) Indigo	27,111,575	22,500,721	16,120,738	29.40	22.91	19.12
(*b*) Other	5,317,443	9,542,080	10,726,226	5.77	9.71	12.72
Unclassified	521,625	772,278	560,250	.56	.79	.67
Total	92,207,281	98,238,398	84,309,045	100.00	100.00	100.00

Class of application	Sales					
	Value			Percent of total		
	1925–30 average	1933	1934	1925–30 average	1933	1934
Acid	$8,651,526	$8,298,064	$8,231,823	21.94	19.25	19.03
Basic	3,977,258	4,043,067	3,649,446	10.09	9.38	8.44
Direct	9,076,783	10,770,563	10,670,987	23.02	24.99	24.67
Acetate silk			1,002,605			2.32
Lake and spirit-soluble	1,681,736	2,362,932	2,357,128	4.27	5.48	5.45
Mordant and chrome	2,212,390	2,384,753	1,636,925	5.61	5.53	3.78
Sulfur	3,928,982	3,516,559	3,142,387	9.96	8.16	7.27
Vats (including indigo)	9,114,973	10,980,385	11,996,370	23.12	25.48	27.74
(*a*) Indigo	3,741,314	3,506,985	2,887,320	9.49	8.14	6.68
(*b*) Other	5,373,659	7,473,400	9,109,050	13.63	17.34	21.06
Unclassified	784,604	746,146	562,944	1.99	1.73	1.30
Total	39,428,252	43,102,469	43,250,615	100.00	100.00	100.00

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PART III

CONSUMPTION IN THE UNITED STATES OF CERTAIN INORGANIC CHEMICALS IN THE MANUFACTURE OF COAL-TAR PRODUCTS, 1934

Statistics on the consumption of certain inorganic chemicals used in the production of coal-tar products were collected for the first time in 1934. Most of the data were compiled from reports of 132 domestic producers, representing more than 90 percent of the output in 1934; the remainder was estimated. In certain instances, as indicated by footnotes in the table, the figures are estimates based on ratios of actual consumption of inorganic chemicals by several representative producers of coal-tar products.

This list is, of course, not complete; the total shown is far less than the actual consumption of raw materials by this industry. For example, in addition to the figures shown, it is estimated that more than 2,000,000 pounds each of dextrine, talc, and sugar, 3,500,000 pounds of carbon dioxide, and 1,500,000 pounds of glacial acetic acid were used in the production of coal-tar products last year.

Other materials consumed in appreciable quantities were chloroacetic acid, chlorosulfonic acid, oxalic acid, phosphoric acid, tannic acid, boric acid, acetic anhydride, aceto acetic ester, acetone, butyl alcohol, alum, ammonium chloride and sulfate, antimony trichloride, barium chloride, bromine, charcoal, carbon disulfide, carbon tetrachloride, corn starch, copper powder, formaldehyde, glycerin, magnesium oxide, mercury, nickel powder, phosgene, phosphorous oxy and trichlorides, sodium bicarbonate, sodium chlorate, sodium cyanide, sodium phosphate, sodium sulfohydrate, sodium tungstate, metallic sodium, filter cel, zinc chloride, and rosin.

TABLE 10.—*Quantities of certain inorganic chemicals consumed in the United States in the manufacture of coal-tar products, 1934*

Chemical used	Strength	Quantity consumed
Alkalis:		*Pounds*
Ammonia	Anhydrous	6,714,000
Caustic soda	76 percent Na_2O	127,362,000
Caustic potash	90 percent KOH	4,789,000
Lime [1]	Hydrated	10,314,000
Soda ash	58 percent Na_2O	40,814,000
Calcium carbonate [1]	Tech	21,330,000
Acids:		
Hydrochloric	18° Be	134,782,000
Nitric	40° Be	28,866,000
Mixed		46,315,000
Sulfuric	66° Be	207,583,000
Other:		
Aluminum chloride	100 percent	3,964,000
Calcium chloride [1]	Tech	3,780,000
Chlorine	100 percent	117,182,000
Copper sulfate [1]	Crystals	2,284,000
Ferrous chloride [1]	Tech	1,696,000
Ferrous sulfate [1]	do	3,132,000
Iron borings [1]		129,341,000
Sodium acetate [1]	Tech	2,624,000
Sodium bichromate [1]	do	2,484,000
Sodium chloride [1]	do	177,842,000
Sodium nitrite	do	6,954,000
Sodium sulfate [1]	do	3,726,000
Sodium sulfide	Fused	4,495,000
Zinc dust [1]		17,410,000
Total		1,105,783,000

[1] Estimated.

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PART IV

DETAILED STATISTICS OF IMPORTS INTO THE UNITED STATES OF DYES AND OTHER COAL-TAR CHEMICALS, AS OBTAINED FROM AN ANALYSIS OF INVOICES

(Pars. 27 and 28, Tariff Act of 1930)

Imports of coal-tar dyes in 1934, as reported in official statistics, were 4,239,753 pounds with a dutiable value of $5,455,603. These are analyzed in considerable detail in part VII, appendix 1, of this report. An analysis of invoices by the Commission covered imports of 3,392,717 pounds valued at $5,035,325. There are unimportant discrepancies between the figures obtained from the analysis of invoices and the official figures. The reasons for these differences are: Incomplete coverage of the invoice analyses; broader statistical classifications in the official figures than in the detailed figures; and in the case of values, the fact that dutiable values are used in official figures and invoice values in the analysis.

Table 11 affords a comparison of imports of coal-tar dyes since 1923 with imports in the fiscal year 1914. The figures for quantity in the year 1914 were taken from Department of Commerce, Special Agent Series 121, and for value from Commerce and Navigation. The figures for the years 1924 to 1930, inclusive, were taken from the annual Census of Dyes and Other Synthetic Organic Chemicals, published by the United States Tariff Commission; those for the years 1931–34 are from Statement 2865, published jointly by the Tariff Commission and the Department of Commerce.

TABLE 11.—*Coal-tar dyes: Imports into the United States, fiscal year 1914 and calendar years 1924–34*

Year	Quantity	Invoice value	Year	Quantity	Invoice value
	Pounds			*Pounds*	
1934	3,392,717	$5,035,325	1928	5,351,951	$4,321,867
1933	4,288,214	4,791,704	1927	4,233,046	3,413,886
1932	3,903,236	3,516,347	1926	4,673,196	4,103,301
1931	4,736,712	4,099,521	1925	5,209,601	4,637,240
1930	4,114,882	3,500,154	1924	3,022,539	2,908,778
1929	6,437,147	5,374,085	1914	45,950,895	9,502,714

TABLE 12.—*Coal-tar dyes: Percentage of imports from principal producing countries, 1933 and 1934*

Country of origin or shipment	Percent of total quantity	
	1934	1933
Germany	53.94	58.97
Switzerland	45.16	38.86
England	.83	2.02
Other	.07	.15
Total	100.00	100.00

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TABLE 13.—*Coal-tar dyes: Imports into the United States, classified by method of application, 1933 and 1934*

Class of dye	1934			1933		
	Quantity	Invoice value	Percent of total quantity	Quantity	Invoice value	Percent of total quantity
	Pounds			*Pounds*		
Acid	558,684	$795,547	16.47	732,405	$849,296	17.08
Vat	911,354	1,218,384	26.86	1,339,218	1,263,242	31.23
Mordant and chrome	244,715	260,725	7.21	321,206	286,267	7.49
Direct	798,541	1,081,075	23.54	906,101	1,003,002	21.13
Artificial silk	528,743	1,125,013	15.58	586,807	922,790	13.69
Rapid fast	137,775	264,220	4.06	149,750	222,693	3.49
Basic	91,167	151,510	2.69	117,476	140,018	2.74
Sulfur	70,669	46,346	2.08	90,262	47,315	2.10
Color-lake and spirit soluble	40,768	78,697	1.20	36,615	47,247	.85
Unclassified, miscellaneous	10,301	13,808	.31	8,374	9,834	.20
Total	3,392,717	5,035,325	100.00	4,288,214	4,791,704	100.00

TABLE 14.—*Coal-tar chemicals: Imports into the United States (from invoice analysis), 1933 and 1934*

	1934		1933	
	Quantity	Invoice value	Quantity	Invoice value
	Pounds		*Pounds*	
Aromatic chemicals	24,739	$48,824	46,053	$77,186
Medicinals and pharmaceuticals	14,089	68,532	11,145	39,394
Photographic developers, intermediates, and other coal-tar chemicals	1,918,888	1,889,163	1,699,311	1,146,374
Color-lakes	14,112	9,428	11,584	6,907

TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*

Colour index no.	Competitive status [1]	Name of dye	Quantity
		ACID DYES	*Pounds*
9	NC	Martius yellow crystals	75
11		Amido yellow E	50
16	C	Fast yellow extra	5
27	C	Acid orange F conc	1,542
32	C	Brilliant sulphon red B	496
54	NC	Sorrel red X	2,400
77		Pilatus scarlet A	75
114		Erio fast red B	110
114	C	Kiton fast red R	2,090
			2,200
145	NC	Jasmine high conc	1,328
150	NC	Orange S	550
167		Pilatus chrome brown RX	250
239	NC	Acid brown G	285
246	NC	Blue black NSF	50
252		Cotton scarlet extra	75
256	NC	Cloth red 3G extra	375
307	C	Acid milling black BB conc	13,229
315	NC	Brilliant black BX	2,750
636	C	Fast light yellow 2G	25
639	NC	Acid chrome yellow GL	525
639	C	Flavazine E3GL	20
639		Supra light yellow GGL	100
			645
642	C	Acid milling yellow P	2,558
667	C	Benzyl green B	440
667	C	Erioviridine B supra I	12,127
			12,567

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye		Quantity
		ACID DYES—continued		*Pounds*
669		Acid green BB		75
670	C	Acid green F conc		50
671	C	Erioglaucine AP	16,532	
671	NC	Erioglaucine EP	2,204	
671	NC	Erioglaucine X high conc	3,307	
				22,043
672	C	Erioglaucine supra	2,206	
672	C	Kiton pure blue V	2,535	
672	C	Xylene blue VS	882	
				5,623
673	C	Xylene blue AS		3,196
692		Acid magenta	112	
692	NC	Acid magenta AS	180	
692	NC	Acid magenta O	2,250	
				2,542
695	C	Acid violet 4BN		1,152
696	C	Eriocyanine RC	165	
696	C	Kiton fast violet 10B	1,213	
				1,378
698	C	Acid violet 4B	220	
698		Benzyl violet 5BN	220	
				440
699	C	Eriocyanine AC		3,306
700		Alkali violet 4BNOO		50
702		Acid violet 7B		25
704	C	Alkali blue no. 4		100
707	NC	Ink blue BJTBN	1,000	
707	NC	Soluble blue I old	925	
				1,925
712	C	Patent blue V		2,900
714	C	Kiton blue A		3,858
715	NC	Blue extra	1,750	
715	NC	Blue FF	50	
715		Xylene cyanol FF extra	1,775	
				3,575
717		Acid violet 6BN	3,858	
717		Acid violet 6BNOO	400	
				4,258
733		Intensive blue B		100
735	C	Alkali fast green 3G	1,750	
735		Erio green B supra	5,512	
735	C	Kiton fast green V	551	
735	C	Naphthalene green high conc	550	
735		Xylene fast green B	2,006	
				10,369
748	NC	Acid rhodamine B	209	
748	NC	Sulpho rhodamine B extra	1,150	
748	NC	Xylene red B conc	507	
				1,866
756		Fast acid eosine G		50
758		Acid violet 4RNOO	50	
758		Fast acid violet R	150	
				200
760	NC	Violamine IA3BA		19
767	NC	Chrysoline A		2,950
768	C	Eosine AG extra	50	
768	C	Eosine GFF extra	1,150	
				1,200
774		Phloxine		25
801	C	Quinoline yellow	3,600	
801	NC	Quinoline yellow S	55	
				3,655
828	NC	Azo carmine GX		500
829	NC	Azo carmine BX		1,050
833	NC	Wool fast violet B	150	
833		Xylene milling blue GL	2,028	
				2,178
853	NC	Acid cyanine BF		5,653
865	NC	Nigrosine	661	
865	NC	Nigrosine T	3,350	
865	NC	Silver gray P	200	
				4,211
1053	NC	Alizarin light blue ESE		6,172
1058	NC	Alizarin uranol BB	25	
1058		Alizarin uranol R	50	
				75
1060	C	Anthracene blue SWGG		25

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye		Quantity
		ACID DYES—Continued		
1063		Alizarin cyanine BBS	18	
1063	NC	Anthracene blue SWR	600	Pounds 618
1073		Alizarin light violet RS conc	496	
1073	C	Anthralan violet 3B	1,500	1,996
1075		Alizarin light blue 3G conc		220
1076	NC	Alizarin direct blue RBX	225	
1076	NC	Alizarin light blue R	3,008	
1076	NC	Lanasol blue R	110	3,343
1077		Alizarin light blue BGAOO		540
1089		Anthraquinone blue SR		1,850
1091	NC	Alizarin fast rubine R	25	
1091		Alizarin rubinol 5G	400	425
1092	NC	Anthralan violet 3R		1,150
	NC	Acetyl black N		88
	NC	Acetyl brilliant orange N		22
	NC	Acid alizarin blue green L		25
		Acid black BR		110
		Acid black R		9,463
	C	Acid blue RBF		1,874
	NC	Acid blue TCR		300
	NC	Acid blue black B		552
		Acid brown RN		331
	NC	Acid leather brown EG		5,300
	NC	Acid leather brown EGB		7,025
	NC	Acid leather brown E3G		25
	NC	Acid leather brown EKM		25
	NC	Acid leather brown ER		17,350
	NC	Acid leather brown E3RN		25
	NC	Acid leather brown ET		3,075
	NC	Acid leather brown GBL		1,655
	NC	Acid leather brown RFF		55
		Acid leather brown 3R		110
	NC	Acid leather brown S		55
	NC	Acid leather dark brown G		55
	NC	Acid leather dark brown R		55
	NC	Acid leather dark brown V		55
	NC	Acid light green AEJ conc		3,538
	NC	Acid milling black BBF supra		55
	NC	Acid milling scarlet G		110
		Acid milling yellow G		1,234
		Acid pure blue BR		2,755
	NC	Acid pure blue R supra		4,410
	NC	Acid rhodamine R		4,626
	NC	Acid rhodamine 3R		882
	NC	Acid violet CBB		350
	NC	Acid violet C10BX		100
	NC	Acid violet R extra		760
		Acid violet RN		110
	C	Acid yellow 2P		507
		Alizarin astrol violet B		125
	NC	Alizarin cyanine green 5G		700
	C	Alizarin direct blue BH		50
	NC	Alizarin direct violet ER		275
	NC	Alizarin light blue 4GL conc		1,830
		Alizarin light brown BL		3,084
	NC	Alizarin light gray G		198
		Alizarin light violet 2RC		507
	NC	Alizarin milling blue SL conc		904
	NC	Alizarin sky blue FFB		250
		Alizarin sky blue FFG		25
	NC	Alizarin sky blue NA		50
	NC	Alizarin supra blue SES		300
	NC	Alizarin supra sky R		5,250
		Alkali fast green BBF		100
		Alkali fast green 10G		110
	NC	Alphanol brown B		3,600
	NC	Amido fast red GG		500
	NC	Amido naphthol brown 3G		2,900
	NC	Anthralan red B		2,100
		Anthralan violet 6B		25
	NC	Anthralan violet 4BF		75
	NC	Anthralan yellow RRT		450

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		ACID DYES—continued	*Pounds*
	NC	Benzyl fast blue GL	300
	NC	Blue FFG high conc	700
		Blue black HF	250
	NC	Brilliant acid blue B	125
		Brilliant acid cyanine G	220
	NC	Brilliant acid flavine 5J	165
		Brilliant acid violet 6B	25
	NC	Brilliant cyanine 6B 1,544	
	NC	Brilliant indocyanine 6B 23,050	
			24,594
	NC	Brilliant indocyanine G 6,625	
		Fast silk blue J 661	
			7,286
		Brilliant sulpho flavine FF	75
	NC	Brilliant wool blue FFB	5,600
		Brilliant wool blue FFBR	93
	NC	Cloth fast green G	495
	NC	Cloth fast orange G	330
	NC	Cloth fast orange R	991
	NC	Cloth fast red 3B	1,761
	C	Cloth fast yellow G	220
	C	Cloth fast yellow GG	2,314
	NC	Cloth fast yellow 5G	6,393
	C	Cloth fast yellow R	1,322
	C	Coomassie violet 2RS	120
	NC	Discharge black B	1,653
	NC	Discharge red B for silk	798
	NC	Discharge red J	154
		Discharge yellow CA	683
		Erganil dark brown C	25
	NC	Erganil gray RC	275
	NC	Erio azurine 3B	22
		Erio fast black B	1,324
		Erio fast brilliant fuchsine BBLS	1,078
	NC	Erio fast brown R	2,180
	NC	Erio fast brown 5RL	7,240
	NC	Erio fast orange GL	55
	NC	Erio fast red 2B	55
	NC	Erio fast red G	720
	NC	Fast acid black N	7,717
	NC	Fast acid green BB	1,975
	NC	Gloria yellow G	100
	NC	Guinea brown GBX	220
	NC	Guinea brown GRL	4,470
		Guinea brown RLS	250
		Guinea fast green B	25
	NC	Kiton brown R	330
	NC	Kiton fast green A	771
	NC	Kiton fast red 4BL	2,204
	NC	Kiton fast red GL	165
	C	Kiton fast yellow G	550
	NC	Lanasol violet R	330
	NC	Metanil red 3B	1,450
	NC	Milling orange G	600
		Milling orange GN	600
	C	Milling yellow HG	1,300
	C	Milling yellow H3G	450
	C	Milling yellow H5G	4,250
		Milling yellow O	2,750
	C	Minaxo acid brown G	2,000
	NC	Neolan blue G	1,544
	NC	Neolan blue GG	22,041
	NC	Neolan blue RR	3,419
	NC	Neolan Bordeaux B	220
	NC	Neolan Bordeaux R	5,624
	NC	Neolan brown R	495
	NC	Neolan green BG	110
	NC	Neolan green LBN	1,542
	NC	Neolan orange G	3,036
	NC	Neolan orange R	2,865
	NC	Neolan orange RR	110
	NC	Neolan pink B	7,385
	NC	Neolan pink G	660
	NC	Neolan red BRE	110
	NC	Neolan red GRE	1,763
	NC	Neolan red R	699
	NC	Neolan violet B	220
	NC	Neolan violet R	1,101

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar-dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		ACID DYES—continued	*Pounds*
	NC	Neolan violet 5R	55
	NC	Neolan yellow BE	2,536
	NC	Pilatus fast yellow EL	800
			3,336
	NC	Neolan yellow G	882
	NC	Neolan yellow 6G	551
	NC	Neolan yellow GR	5,952
		Neotolyl black TL extra	950
	NC	Neutral brown RX	63,934
		Neutral orange GX	220
		Neutral red BX	276
	NC	Neutral yellow RX	2,180
		Novazol acid blue BL	1,654
		Novazol acid blue GL	2,756
		Novazol acid blue SL	1,102
		Novazol blue B	4,410
		Novazol violet B	110
	NC	Patent blue AE	270
	NC	Pilatus fast black GG	1,600
	NC	Pilatus fast black WAN	300
		Pilatus fast blue B	650
	NC	Pilatus fast blue BN	575
	NC	Pilatus fast blue G	350
	NC	Pilatus fast blue GGN	5,650
		Pilatus fast blue GR	1,250
	NC	Pilatus fast blue black BN	5
	NC	Pilatus fast Bordeaux RNX	150
		Pilatus fast brown BRRNO	1,450
	NC	Pilatus fast brown GGNX	250
	NC	Pilatus fast brown RN	25
	NC	Pilatus fast claret BN	25
	NC	Pilatus fast claret RNX	950
	NC	Pilatus fast dark green BNOO	325
	NC	Pilatus fast green BLN	250
		Pilatus fast marine blue RENA	250
	NC	Pilatus fast orange GEN	25
	NC	Pilatus fast orange GN	1,950
	NC	Pilatus fast orange RN	1,400
	NC	Pilatus fast pink B	100
	NC	Pilatus fast pink BNOO	800
	NC	Pilatus fast pink G	450
	NC	Pilatus fast red GRE	725
		Pilatus fast violet 3RN	50
		Pilatus fast yellow G	300
	NC	Pilatus fast yellow 3GN	425
		Pilatus fast yellow 6GN	75
	NC	Pilatus fast yellow GRN	5,200
	NC	Polar blue G	662
	C	Polar brilliant red B	8,820
		Polar brilliant red 3B conc	331
	NC	Polar brilliant red 5B	110
		Polar brilliant red 3BN	3,418
	NC	Polar gray	4,705
	NC	Polar gray greenish	385
	NC	Polar maroon V	2,205
	NC	Polar maroon VO	1,653
		Polar yellow 3G	276
	NC	Radio brown B	550
		Selan printing brown 3R	1,225
		Sella acid brown B	551
	NC	Sella acid brown G	1,604
	NC	Sella acid brown R	526
		Sellaflavine GC	55
	NC	Silk discharge blue PF	50
	C	Silk yellow GF	175
	C	Silk yellow R	6,486
	C	Solway ultra blue BS	10
	NC	Sulpho rhodamine BG	2,050
	NC	Sulpho rhodamine G extra	50
		Sulphon yellow 5G	250
		Supramine blue FB	300
		Supramine blue R	1,000
		Supramine Bordeaux B	1,350
	NC	Supramine brown G	2,700
	C	Supramine brown R	750
	NC	Supramine green G	200
	NC	Supramine orange G	100

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye		Quantity
		ACID DYES—continued		*Pounds*
	NC	Supramine red B		3,300
	NC	Supramine violet R		100
		Supramine yellow G		100
	C	Supramine yellow 3G		600
	NC	Supramine yellow 3GL		450
	NC	Wool blue N		50
	NC	Wool discharge blue GN		75
	NC	Wool fast blue FFG		625
	NC	Wool fast navy MG conc		110
		Wool fast red 3B		250
	NC	Wool printing red B		33
	NC	Xylene milling red B conc		1,543
		VAT DYES		
969	NC	Ciba blue RH	440	
969	C	Ciba blue 2RH	990	
969	C	Hydron blue R paste	14,800	
				16,230
971	C	Hydron blue G paste, G pdr. (s. s.)		20,945
1093	NC	Vat blue WB pdr.		1,998
1102	C	Vat black BGA dbl. pst. (s. s.)		600
1104	NC	Cibanone violet R paste		2,249
1106	NC	Vat blue RSN		22
1108	NC	Vat blue RK paste		375
1109	C	Vat blue 3G paste	525	
1109	C	Vat blue 3GN pdr. (s. s.)	2,250	
				2,775
1110	NC	Vat blue GGSL pdr. (s. s.)	950	
1110	NC	Vat blue GGLNL dbl. pst. (s. s.)	6,000	
1110	C	Vat blue GGSZ dbl. pst. (s. s.)	1,300	
				8,250
1111	C	Vat blue 5G pdr. (s. s.)		800
1116	C	Vat green BB pdr. (s. s.)		2,000
1120	C	Algol brown BT paste		125
1123	NC	Algol gray R pdr. (s s.)		4,800
1131		Vat red 5GK pdr. (s. s.)		280
1132	C	Vat yellow GK pdr. (s. s.)		3,300
1133	NC	Algol red BK pdr. (s. s.)		1,000
1134	C	Vat brilliant violet BBK suprafix		325
1135	C	Vat brilliant violet RK paste, RK pdr. (s. s.)		10,350
1136	NC	Grelanone orange R pdr. (s. s.)		528
1137	NC	Vat orange 6RTK pdr. (s. s.)		80
1138	NC	Algol yellow 4GK pdr. (s. s.)		375
1142	NC	Algol red GT paste, GT pdr. (s. s.)		1,300
1143	NC	Vat Bordeaux B		469
1144	NC	Vat corinth RK pdr. (s. s.)		1,200
1145	NC	Vat gray GK pst., GK pdr. (s. s.)	800	
1145		Vat gray K pdr. (s. s.)	200	
				1,000
1149	NC	Vat brown GR paste, GR pdr. (s. s.)		5,250
1151	NC	Vat brown BR paste, BR pdr. (s. s.)		61,800
1161		Vat red violet RRK pst., RRK pdr. (s. s.)		3,175
1162	C	Cibanone red RK paste	1,058	
1162	C	Vat red RK pst., RK pdr. (s. s.)	4,850	
1162	C	Vat red RKP pdr. (s. s.)	4,000	
				9,908
1163	C	Vat violet FFBN paste, FFBN pdr. (s. s.)		11,062
1169	C	Cibanone orange R paste, R pdr. (s. s.)		1,760
1170	C	Cibanone yellow R pdr. (s. s.)		7,928
1171	NC	Cibanone brown B pdr. (s. s.)		3,465
1172	NC	Cibanone black B paste		3,439
1173	C	Cibanone blue 3G paste		3,748
1176	NC	Helindone yellow CG vat	25	
1176	NC	Indigosol yellow HCG	2,571	
				2,596
1178	C	Indigo vat BASF	100	
1178	NC	Indigosol O	3,928	
				4,028
1182	NC	Indigosol OR		440
1183	C	Indigo pure BASF/RB		125
1184		Brilliant indigo 4B pdr. (s. s.)	500	
1184	NC	Indigosol O4B	37,000	
				37,500
1186	C	Indigo MLB/6B pdr. (s. s.)		250
1188	NC	Brilliant indigo BB paste, BB pdr. (s. s.)		6,203
1189	NC	Brilliant indigo 4G paste		30,498
1190	NC	Brilliant indigo B paste		15,087

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		VAT DYES—continued	*Pounds*
1196	NC	Ciba yellow G paste	2,004
1202	NC	Indigosol AZG	7,208
1203	NC	Helindone blue 3G pdr	5
1207		Algol red 5B paste	2,100
1207	NC	Ciba pink B paste	330
1207	NC	Helindone red BB pdr. (s. s.)	400
			2,830
1209	NC	Algol rubine B pdr. (s. s.)	1,500
1212	NC	Indigosol red violet IRH	355
1217	NC	Indigosol orange HR	5,067
1218	NC	Vat scarlet R paste, R pdr. (s. s.)	4,250
1219		Algol violet BB paste	1,500
1228	NC	Vat scarlet GG paste	650
1247		Natural Madras indigo	1,041
	NC	Algol brilliant green BK paste	1,500
	NC	Algol scarlet B paste, B pdr. (s. s.)	6,925
	NC	Algol violet BBN paste, BBN pdr. (s. s.)	7,454
	NC	Algol violet R pdr. (s. s.)	160
	NC	Algol yellow GR pdr. (s. s.)	1,950
	NC	Caledon gray 3R paste	390
	NC	Ciba blue GBH	110
	C	Ciba brown G paste	95,552
	C	Ciba pink BG paste	4,210
	NC	Cibanone black BA pdr	755
	C	Cibanone blue 3GF paste	3,041
	C	Cibanone dark blue MBA pdr	1,784
		Cibanone golden orange RR pdr. (s. s.)	825
		Cibanone navy blue RA pdr. (s. s.)	440
	NC	Cibanone orange 3R pdr	220
	C	Cibanone orange 6R pdr. (s. s.)	5,230
	NC	Cibanone orange 8R paste, 8R pdr. (s. s.)	5,836
	NC	Cibanone red B pdr. (s. s.)	3,850
	NC	Cibanone red 4B paste, 4B pdr. (s. s.)	9,640
	NC	Cibanone red G pdr. (s. s.)	413
	NC	Cibanone violet BW	220
	NC	Cibanone violet 2BW paste	529
	C	Grelanone red BB paste, BB pdr. (s. s.)	3,325
	NC	Helindone brown CRD vat pdr	300
		Helindone green B vat	55
	NC	Helindone violet BBN pdr	10
	NC	Hydron blue BR pdr	500
	NC	Hydron blue RR pdr	4,350
	NC	Indigo vat BASF/RR	250
	NC	Indigosol HB	110
	NC	Indigosol O6B	10,332
	NC	Indigosol blue IBC	10
	NC	Indigosol brilliant pink I3B	780
	NC	Indigosol brown IRRD	5,623
	NC	Indigosol golden yellow IGK	12,455
		Indigosol golden yellow IRK	275
	NC	Indigosol gray IBL	4,623
	NC	Indigosol green AB	3,554
	NC	Indigosol pink IR	1,984
	NC	Indigosol printing black IB	3,072
	NC	Indigosol printing blue IB	3,435
	NC	Indigosol printing blue IGG	3,026
	NC	Indigosol printing purple IR	1,576
	NC	Indigosol printing violet IBBF	965
	NC	Indigosol printing violet 12R	80
		Indigosol red HR	25
	NC	Indigosol scarlet HB	5,460
	NC	Indigosol scarlet IB	270
	NC	Soledon blue RC paste	100
	C	Vat blue GPZ pdr	1,250
	NC	Vat blue RPZ pdr	1,600
	C	Vat blue RZ dbl. paste (s. s.)	8,784
	C	Vat brilliant blue 3G paste, 3G pdr. (s. s.)	650
	C	Vat brilliant blue R pdr. (s. s.)	3,000
	NC	Vat brilliant orange GK pdr. (s. s.)	900
	NC	Vat brilliant orange GR suprafix	13,600
		Vat brilliant pink 3B pdr	175
		Vat brilliant pink BBL pdr	25
		Vat brilliant violet 3B paste, 3B pdr. (s. s.)	1,500
	C	Vat brilliant violet BRN paste	3,572
	C	Vat brown FFR paste	208
	NC	Vat brown 3GT paste, 3GT pdr. (s. s.)	3,650

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		VAT DYES—continued	
			Pounds
	NC	Vat direct black RB paste, RB pdr. (s. s.)	30,228
	NC	Vat golden yellow RK dbl. paste (s. s.)	4,700
	NC	Vat gray 3B paste	5,450
	NC	Vat gray BG paste, BG pdr. (s. s.)	3,000
	NC	Vat gray M paste	11,625
	NC	Vat gray RRH paste	250
		Vat gray RRM paste	500
		Vat green GT paste	150
		Vat khaki GG pdr. (s. s.)	2,800
	NC	Vat navy blue BF pdr.	25
		Vat navy blue BRF pdr.	150
	NC	Vat navy blue HTR pdr.	132
	NC	Vat navy blue R pdr. (s. s.)	2,000
	NC	Vat olive 3G	1,675
		Vat olive GB dbl. paste (s. s.)	200
		Vat olive GM paste	500
		Vat olive GN paste	4,500
	NC	Vat olive T pdr.	100
	NC	Vat olive green B pdr.	750
		Vat olive green BS pdr.	50
	NC	Vat orange F3R paste, F3R pdr. (s. s.)	1,550
		Vat orange 4R pdr.	50
	NC	Vat orange 7RK paste	650
	NC	Vat printing black B paste	114,200
	NC	Vat printing black BL suprafix	12,032
	NC	Vat printing black TL suprafix	5,000
	NC	Vat printing blue GG	1,600
		Vat printing blue R paste	800
	NC	Vat printing brown GN suprafix	14,700
	NC	Vat printing brown R paste	13,950
	NC	Vat printing brown TM suprafix	6,300
	NC	Vat printing deep black BD paste	11,111
	NC	Vat printing yellow GOK	22
	C	Vat red BK pdr. (s. s.)	200
	NC	Vat red FBB paste, FBB pdr. (s. s.)	2,100
		Vat red GG paste, GG pdr. (s. s.)	1,500
	NC	Vat red brown R paste, R pdr. (s. s.)	34,450
	NC	Vat red brown RR paste	100
	NC	Vat red brown 5RF paste, 5RF pdr. (s. s.)	3,950
		Vat red violet RK paste	500
		Vat scarlet B paste, B pdr. (s. s.)	3,200
	NC	Vat scarlet F3G suprafix	425
	NC	Vat scarlet 4G paste	575
	NC	Vat yellow FFRK paste, FFRK pdr. (s. s.)	5,450
		Vat yellow 3G dbl. paste (s. s.)	1,000
	NC	Vat yellow 6GD suprafix	8
	C	Vat yellow GF paste, GF pdr. (s. s.)	12,600
	C	Vat yellow 3GF paste, 3GF pdr. (s. s.)	10,650
		Vat yellow 5GK pdr. (s. s.)	400
	NC	Vat yellow 7GK pdr.	25
	C	Vat yellow GR pdr.	150
	NC	Vat yellow 3R paste, 3R pdr. (s. s.)	6,350
	NC	Vat yellow 3RT pdr. (s. s.)	4,000
		Vat yellow brown 3G dbl. paste (s. s.)	400
		MORDANT AND CHROME DYES	
157	NC	Eriochrome phosphine RR	2,387
171	NC	Chrome brown RVV	470
173	NC	Metachrome violet B	1,500
219	NC	Eriochrome flavine A	56,216
292	NC	Eriochrome verdon S	4,410
343		Acid alizarin yellow RC	50
720	C	Eriochrome azurol BC	16,537
721	NC	Chromal blue GC	250
721	NC	Polytrop blue 2B	605
			855
722		Eriochrome cyanine RC	5,512
723		Chromazurol S	551
762	NC	Chromorhodine BR	438
879	NC	Chromazurine E	275
879	NC	Chromazurine G	550
			825
884	NC	Chromacetine blue S	2,753
884	NC	Gallo navy blue S	350
884		Modern royal blue	55
			3,158

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		MORDANT AND CHROME DYES—continued	
			Pounds
892		Blue 1900 TCD	414
894	NC	Gallamine blue extra	3,274
905		Gallazine no. 90	881
1019	NC	Alizarin black S	10,250
1027	C	Alizarin red VI	7,081
1033	C	Alizarin orange A	5,000
1033	C	Alizarin orange CA	3,604
			8,604
1034		Alizarin red S	220
1035	NC	Alizarin brown HD	17,300
1040	C	Alizarin red SX	2,450
1045	NC	Alizarin Bordeaux BD	900
1050	NC	Alizarin cyanine RR	450
1051		Alizarin cyanine GG	50
1064	NC	Alizarin cyclamine R	6,500
1067	NC	Alizarin blue S	2,023
1071	NC	Alizarin green S	440
1078	NC	Alizarin cyanine green 3G	650
1080		Anthraquinone violet	850
1084	NC	Alizarin viridine FF	6,810
1085		Alizarin blue black B	500
1085		Alizarin light gray BS conc	198
			698
	NC	Acid alizarin gray	450
	NC	Acid alizarin gray G	5,450
	NC	Acid anthracene brown WSG	2,750
	NC	Acid anthracene red 3BL	1,150
		Acid anthracene red 5BL	150
		Acid chrome blue 3G	100
		Acid chrome red B	400
		Acid chrome yellow RL extra	500
	NC	Alizarin fast gray BBLW	1,950
	NC	Anthracene brown S	11
	C	Anthracene chromate brown EB	1,200
	NC	Azol printing red BB	25
	NC	Azol printing red R	750
	NC	Brilliant alizarin blue B	25
	NC	Brilliant chrome printing red B	114
	NC	Brilliant fast cyanine R	330
		Brilliant violet SB	110
	NC	Chromal violet ROX	220
	NC	Chromazurine DN	363
	NC	Chromazurine HB	110
	NC	Chrome brown B	2,359
	NC	Chrome deep brown AG	770
	NC	Chrome fast black L	220
		Chrome fast orange RD	100
	NC	Chrome fast phosphine B	515
	NC	Chrome fast vesuvine BB	605
	NC	Chrome fast vesuvine RR	50
	NC	Chrome fast xanthine 2R	2,167
		Chrome green GD	25
	NC	Chrome printing orange BW	25
	NC	Chrome printing red B	715
	NC	Chromocitronine 3R	2,754
	NC	Chromocitronine V	330
	NC	Chromorosamine BB	33
	NC	Chromoxane brilliant violet BE	125
	NC	Chromoxane brilliant violet 8B	1,750
	NC	Chromoxane pure blue BLD	1,000
		Diamond green BW	100
		Diamond red 3B	125
		Eriochromal brown AEB	2,756
	NC	Eriochromal brown G	1,874
	NC	Eriochromal brown R	551
		Eriochromal gray 5G	110
	NC	Eriochrome azurol G	551
	NC	Eriochrome blue 2GK supra L	110
		Eriochrome blue S	551
		Eriochrome blue black G	331
		Eriochrome brilliant violet B	2,205
	NC	Eriochrome brilliant violet R supra	690
	NC	Eriochrome brown SWN	276
		Eriochrome geranol R	1,654
	NC	Eriochrome gray BL	77
		Eriochrome green L	110
	NC	Eriochrome orange 2RL conc	55

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		MORDANT AND CHROME DYES—continued	
			Pounds
	NC	Eriochrome red 3B	551
	NC	Eriochrome red G	3,307
	NC	Eriochrome red 6G	55
	NC	Eriochrome violet 3B	2,757
	NC	Eukanol blue	3,210
	NC	Eukanol red	220
	NC	Eukanol rubine	330
	NC	Fast mordant blue B	750
		Gallo fast black	25
		Gallophenine P	200
		Metachrome blue black BBX	250
	NC	Metachrome Bordeaux BL	75
	NC	Metachrome brilliant blue BL	200
		Metachrome brilliant blue 8RL	250
	NC	Metachrome brown 6G	450
	NC	Metachrome olive BL	150
	NC	Metachrome olive GG	2,000
	NC	Metachrome orange 4RL	75
	NC	Metachrome violet RR	850
	NC	Modern black N	2,535
	NC	Modern black ND	385
	NC	Modern gray PB	11
	NC	Modern gray PS	605
	NC	Modern violet O	771
	NC	Mordant gray AS	396
		Naphthochrome azurine B	1,102
	NC	Naphthochrome violet R	4,629
	NC	New chromazurine HB	330
	NC	Novochrome fast brown 3RD	385
	NC	Novochrome fast orange 3RS	110
	NC	Novochrome green B	605
	NC	Novochrome violet R	165
	NC	Omega chrome brown G	2,072
	NC	Radio chrome blue B	2,050
	C	Solochrome fast brown RKS	1,000
	NC	Solochrome red 6BS	120
		Supranol Bordeaux B	100
	C	Supranol brilliant blue G	275
	NC	Supranol brilliant red B	875
	NC	Supranol brilliant red 3B	350
	NC	Supranol brilliant red G	275
	NC	Supranol orange GSO	250
	NC	Supranol orange RR	1,450
	NC	Supranol red BB	1,300
	NC	Supranol red BR	1,550
	NC	Supranol red RX	100
	NC	Ultra cyanol B	606
		DIRECT DYES	
127	C	Brilliant geranine B — 1,050	
127	C	Geranine G — 225	
			1,275
130	C	Erika B	450
131	C	Erika GN	75
224	NC	Stanley red	220
225	C	Thiazine red RXX	300
241	C	Chlorazol fast brown RKS	7,000
273		Diphenyl brown GS	331
278	NC	Benzo fast rubine BL — 125	
278	C	Chlorazol fast red KX — 720	
			845
319		Benzo fast heliotrope BL — 2,800	
319	NC	Benzo fast heliotrope RRL — 600	
319		Chloramine brilliant fast violet 3R — 432	
319	C	Chlorazol fast helio BKS — 120	
			3,952
321	C	Diamine fast scarlet GG	96
324		Diazo brilliant orange GR	775
325	C	Brilliant benzo violet B	6,420
326	C	Benzo fast orange P — 5,450	
326		Benzo fast scarlet 5BL — 150	
326	C	Benzo fast scarlet 5BS — 1,750	
			7,350
327		Benzo fast scarlet 4BS	800
349	C	Benzo fast yellow 4GL	625
368	NC	Ignamine orange 3G	1,200
369	NC	Ignamine orange RR	150

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye		Quantity
		DIRECT DYES—continued		*Pounds*
377	NC	Congo orange G		100
403	NC	Chlorantine fast gray B	4,959	
403		Diphenyl fast gray BC	552	
				5,511
409	C	Diamine orange B		5,349
425	NC	Minaxo red 3BX		1,100
436	C	Chloramine red 8BS		2,600
440	NC	Ignamine orange R		6,350
446	C	Direct orange R		507
448	C	Cotton red 4BFX		1,000
449	NC	Diazo brilliant black B		850
459	C	Diamine orange F		4,775
466	NC	Benzo new blue 5B		1,220
488		Diamine yellow N		50
508	C	Minaxo blue 4BX		100
510	C	Diamine brilliant blue G		5
533	NC	Benzo fast blue FR		200
559	NC	Direct bronze G		110
577	C	Trisulphon brown 2G		4,693
590	C	Polyphenyl blue GC		2,756
595		Diazo olive G		425
596	NC	Benzo chrome brown G	1,850	
596	NC	Cupranil brown 3G	330	
				2,180
597	NC	Benzo chrome brown R		1,650
606	NC	Dianil yellow 5G		2,950
617		Golden roseine crystals		336
621		Chloramine orange G		25
622	NC	Stilbene yellow 3GX		300
626	NC	Diphenyl orange RR		1,102
628	NC	Diphenyl catechine G supra		15,433
629		Diphenyl fast brown GF		110
653	C	Pyrazol orange G		5,809
654		Diazo fast yellow GG		2,400
710	NC	Brilliant sky blue 8G extra	5,225	
710	NC	Direct brilliant blue 8B	220	
				5,445
813		Mimosa Z		1,103
	NC	Benzo chrome brown B		11,300
	NC	Benzo dark brown extra		4,500
	C	Benzo fast black L		4,550
		Benzo fast blue GGL		25
	NC	Benzo fast blue 8GL		1,750
	NC	Benzo fast Bordeaux 6BL		1,375
	NC	Benzo fast brown 3GL	10,250	
	NC	Direct fast brown 3GL	3,966	
				14,216
	NC	Benzo fast brown RL		19,500
	NC	Benzo fast eosine BL		75
	NC	Benzo fast gray BL		3,950
	NC	Benzo fast heliotrope 4BL		3,560
	NC	Benzo fast heliotrope 6BL		500
		Benzo fast heliotrope 5RH		25
	NC	Benzo fast light scarlet 4BL		3,750
	NC	Benzo fast orange RRL		4,600
	NC	Benzo fast red 6BL		600
	NC	Benzo fast red GL		400
	C	Benzo red 12B		1,550
	NC	Benzo rhodulineredred 3B	850	
	NC	Direct fast red 3B	3,857	
				4,707
	NC	Benzoform blue BBL		2,650
	NC	Benzoform brown 4R		2,250
	NC	Benzoform green FFL		1,175
	NC	Benzoform orange G		500
	NC	Benzoform scarlet B		1,950
	NC	Benzoform yellow GL		450
	C	Brilliant alizarin light red B		717
	NC	Brilliant benzo fast yellow GL		2,250
	NC	Brilliant benzo green B		12,250
	NC	Brilliant benzo violet BBH		175
	NC	Brilliant benzo violet RR		800
	NC	Brilliant congo blue BFL		5,650
	NC	Brilliant congo blue 5R		750
	NC	Brilliant congo violet R		400
		Brilliant fast blue 3BX		25
	NC	Brilliant sky blue RRM		4,650

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		DIRECT DYES—continued	
			Pounds
		Chicago red III	3,032
	NC	Chloramine brilliant fast blue A	198
	C	Chloramine brown 2R	1,015
	NC	Chloramine copper blue 3G	519
	NC	Chloramine fast brown no. 12	3,814
	NC	Chloramine fast brown R conc	529
	NC	Chloramine fast brown 4RL	1,102
	C	Chloramine fast orange 2G conc	7,914
	NC	Chloramine fast orange 2RN	5,027
		Chloramine fast scarlet GFL	3,548
	NC	Chloramine fast violet R	287
	NC	Chloramine light violet R	1,234
		Chloramine violet FFB	150
	NC	Chlorantine fast blue 8GL	1,873
	NC	Chlorantine fast blue 10GL	220
	C	Chlorantine fast blue 3GLL	4,519
	NC	Chlorantine fast Bordeaux 2BL	2,094
	NC	Chlorantine fast Bordeaux BLN	330
	NC	Chlorantine fast brown BRL	56,220
	NC	Chlorantine fast brown 5GL	6,062
	NC	Chlorantine fast brown 4RL	5,290
	NC	Chlorantine fast brown 8RL	4,849
	C	Chlorantine fast gray 2BLL	550
	NC	Chlorantine fast gray 4BLL	440
	NC	Chlorantine fast green B	27,557
	NC	Chlorantine fast orange 2RL	440
	C	Chlorantine fast orange T4RLL	2,756
	NC	Chlorantine fast red 6BL	2,864
	NC	Chlorantine fast red 5GL	220
	NC	Chlorantine fast violet 5BL	14,327
	NC	Chlorantine fast violet 8BLL	220
	NC	Chlorantine fast violet RL	1,544
	NC	Chlorantine fast violet 2RL	2,094
	NC	Chlorazol brilliant violet B	120
	NC	Chlorazol drab RHS	720
	C	Chlorazol fast orange AGS	1,000
	NC	Chlorazol fast orange GS	120
	C	Chlorazol fast red GS	240
	NC	Chlorazol steel blue 6BS	120
	NC	Columbia catechine G	300
	NC	Corinth brown BF	55
	NC	Cotton black A4G	3,500
		Developed black ED	50
		Developed fast Bordeaux BL	220
	NC	Developed pure blue B	331
		Developed red 4B	1,213
	NC	Developing black ED	200
	NC	Diamine brilliant rubine S	25
	NC	Diamine catechine B	5,313
	NC	Diamine catechine G	6,600
		Diamine fast brown GB	400
	NC	Diamine fast brown GF	600
	NC	Diamine fast brown R	3,700
	C	Daimine fast orange EG	675
		Diamine fast orange ER	2,100
		Diamine gray G	25
	NC	Diazanil scarlet 3BA	425
		Diazo Bordeaux 7B	300
	NC	Diazo brilliant blue BBL	1,000
	NC	Diazo brilliant blue BBLA	25
		Diazo brilliant green 6G	700
	NC	Diazo brilliant orange 5G	1,950
	NC	Diazo brilliant scarlet B	400
	NC	Diazo brilliant scarlet 6B	375
		Diazo brilliant scarlet 3BA	50
	NC	Diazo brilliant scarlet G	550
	C	Diazo brilliant scarlet S4BN	700
		Diazo brown G	200
	NC	Diazo brown 3G	500
	NC	Diazo brown 6G	9,750
	NC	Diazo brown 2GWA	1,323
	NC	Diazo brown 3R	3,100
		Diazo brown 3RB	2,400
	NC	Diazo brown RWA	992
	NC	Diazo fast blue 6GW	415
	NC	Diazo fast Bordeaux BL	6,875
		Diazo fast green GFL	250

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		DIRECT DYES—continued	*Pounds*
		Diazo fast green GL	25
	NC	Diazo fast red 7BL	2,600
	NC	Diazo fast violet BL	2,400
		Diazo fast violet 3RL	200
	NC	Diazo fast yellow 3GL	375
	NC	Diazo geranine B	275
		Diazo green 3G	225
		Diazo indigo blue 4GL	950
	NC	Diazo sky blue B	4,575
	NC	Diazo sky blue 3G	1,200
	NC	Diazo yellow R	75
		Diphenyl blue R	500
		Diphenyl brilliant violet 3B supra	110
	NC	Diphenyl brown BBNC	5,510
	NC	Diphenyl catechine R supra	13,230
	NC	Diphenyl fast blue green BL supra	14,875
	NC	Diphenyl fast Bordeaux BC	882
	NC	Diphenyl fast bronze B	4,961
	NC	Diphenyl fast brown GNC	11,025
	NC	Diphenyl fast brown 8RL	551
	NC	Diphenyl fast gray GL	441
	NC	Diphenyl fast yellow GL supra	660
	NC	Diphenyl green FF	110
	NC	Direct brilliant blue 6BR	771
		Direct brilliant blue RR	55
	NC	Direct chrome black blue B	55,607
	NC	Benzo chrome black blue B	32,850
			88,457
	NC	Direct cutch brown BS	1,322
	NC	Direct cutch brown GR	882
		Direct fast yellow GL	331
	NC	Direct gray R	2,449
	C	Direct safranine RW	440
	NC	Fast cotton blue FFG	3,650
	NC	Fast cotton brown 4RL	100
		Fast cotton corinth B	50
	NC	Fast cotton rubine 3B	250
	NC	Fast cotton rubine 5B	225
	NC	Fast cotton violet 4R	75
	C	Fast silk sky blue 6G	315
	NC	Fastusol black VE	1,650
	NC	Fastusol blue LFFGL	175
	NC	Fastusol blue LFFRL	2,100
	NC	Fastusol blue LGL	70
	NC	Fastusol blue L3R	75
	NC	Fastusol brown LBRL	3,050
	NC	Fastusol green LBB	4,800
	NC	Fastusol green LBL	5,100
	NC	Fastusol orange F3G	25
	NC	Fastusol orange LGG	25
		Fastusol red violet LBBL	25
	NC	Fastusol red violet LRL	175
	NC	Fastusol rubine LBB	75
		Fastusol violet LBL	150
		Formal fast blue B	220
	NC	Minaxo brilliant red B	800
	NC	Minaxo light pink BBX	325
	NC	New Claret RX	125
		Para brown BK	500
		Para brown GK	4,400
	NC	Para brown RK	5,075
		Para brown V	800
	NC	Para yellow R	300
	NC	Paranil brown O	100
	NC	Parasulphon brown G	1,035
		Pluto black G	500
	NC	Pluto brown GG	1,300
		Polyphenyl black SG	55
	NC	Polyphenyl dark blue SR supra	165
	NC	Rosanthrene 3BN	1,985
	C	Rosanthrene R	385
	NC	Rosanthrene RN	2,202
	NC	Rosanthrene Bordeaux B	3,307
	C	Rosanthrene brilliant orange 4R	110
		Rosanthrene brilliant red BR	1,541
	NC	Rosanthrene fast Bordeaux 2BL	17,636
	NC	Rosanthrene fast green BG	220
	NC	Rosanthrene fast red 7BL	6,172

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		DIRECT DYES—continued	
			Pounds
	NC	Rosanthrene fast red 8BL	110
	NC	Rosanthrene orange R	16,534
	NC	Rosanthrene violet 5R	110
	C	Silk blue BT5B	650
	NC	Silk printing brown RN	33
		Sky blue N	750
		Toluylene fast brown RR	200
	NC	Toluylene fast orange GL	650
		Toluylene fast orange LX	550
	NC	Toluylene yellow G	200
		Triazol fast orange 2RL	220
	NC	Trisulphon blue FO	99
		Trisulphon bronze BG conc	3,108
	NC	Trisulphon brown BP conc	79,049
	NC	Trisulphon fast brown BL conc	657
	NC	Union blue 3R	3,750
	NC	Vulcan fast orange G	4,075
	NC	Vulcan fast red B	160
	NC	Vulcan fast red BF	200
	NC	Vulcan fast red GF	5
		Vulcan fast yellow 5G	25
	NC	Vulcan fast yellow GR	4,750
	NC	Vulcan red MO	50
	NC	Zambezi black F	2,000
		ARTIFICIAL SILK DYES	
		Acetate black no. 1	949
	NC	Artificial silk blue G	1,761
	NC	Artificial silk blue R	1,975
	NC	Artisil direct blue AG	551
	NC	Artisil direct blue BRP	5,644
	C	Artisil direct blue SAP	4,563
	NC	Artisil direct orange 2R	2,028
	NC	Celliton orange GR	11,109
			13,137
	C	Artisil direct orange 3RP	594
	NC	Artisil direct red 3B	220
	NC	Artisil direct red BP	2,469
	NC	Artisil direct red 3BP	2,579
	NC	Artisil direct scarlet GP	4,332
	NC	Artisil direct violet BP	2,514
	C	Artisil direct violet 2RP	803
	NC	Artisil direct yellow GN	517
	C	Cibacete yellow GN	1,101
			1,618
	NC	Artisil direct yellow 2GP	5,421
	C	Cibacete yellow 2GN	1,543
			6,964
	NC	Artisil direct yellow 3GP conc	4,379
	NC	Artisil pale blue conc	100
		Artsilk black R	3,750
	NC	Benzo viscose blue 3GFL	1,150
		Benzo viscose blue R	75
		Benzo viscose gray 5B	25
	NC	Benzo viscose green BL	550
	NC	Cellit blue R	25
	NC	Cellit brown R	25
	NC	Cellit fast violet 4R	75
	NC	Cellit fast yellow GGN	100
	C	Celliton blue extra	13,403
	NC	Celliton blue G	1,050
		Celliton discharge blue 3R	150
	NC	Celliton discharge violet B	25
		Celliton fast black B	5,600
		Celliton fast black BTN	5,250
		Celliton fast black GN	100
	C	Celliton fast blue B	3,000
	NC	Celliton fast blue BF	1,200
		Celliton fast blue R	25
	NC	Celliton fast blue green B	29,525
		Celliton fast brown 3R	2,156
	NC	Celliton fast brown 5R	100
	NC	Celliton fast navy blue B	28,050
	NC	Celliton fast navy blue BR	25,825
	NC	Celliton fast navy blue GTN	850
	NC	Celliton fast pink B	1,849
	NC	Celliton fast pink F3B	2,850

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		ARTIFICIAL SILK DYES—continued	
			Pounds
		Celliton fast pink RF	50
	C	Celliton fast red violet RN	1,400
	NC	Celliton fast rubine B	3,892
	NC	Celliton fast rubine 3B	25
	NC	Celliton fast scarlet R	25
		Celliton fast violet B	858
	NC	Celliton fast violet 6B	1,482
	C	Celliton fast yellow G	10,100
	NC	Celliton fast yellow GR	4,500
	C	Celliton fast yellow RR	7,462
		Celliton orange R	1,376
	C	Celliton pink R	494
		Celliton printing yellow 3R	75
		Celliton red R	948
		Celliton red brown 5R	150
	NC	Celliton scarlet B	9,200
		Celliton violet R	25
	C	Celliton yellow 3G	25
	NC	Celliton yellow 5G	34,027
	NC	Celliton yellow 3 GN	2,275
	NC	Cibacete black BN green shade	4,845
	NC	Cibacete black DGN	1,541
	NC	Cibacete black TBN	55
	NC	Cibacete blue BR	1,100
	C	Cibacete blue BRF	220
	NC	Cibacete blue 2R	330
	C	Cibacete diazo black B	6,503
	C	Cibacete diazo black J	9,919
	NC	Cibacete navy blue BN green shade	9,589
	NC	Cibacete navy blue GRN	55
	NC	Cibacete orange RR	6,283
	NC	Cibacete orange 4R	715
	NC	Cibacete red 3B	19,952
	NC	Cibacete red 2GR	220
	NC	Cibacete sapphire blue G	9,991
		Cibacete scarlet G	3,858
	NC	Cibacete violet B	2,315
	C	Cibacete violet 2R	550
	NC	Cibacete yellow 3G	3,086
	NC	Cibacete yellow 5G	110
	NC	Cibacete yellow 2RN	55
	NC	Derma carbon B	2,020
	NC	Dispersol fast crimson BS	10
	C	Dispersol fast red A	240
	C	Dispersol fast yellow A	959
	NC	Dispersol yellow 3G	300
	NC	Duranol brilliant violet B	240
	C	Duranol red G	60
	NC	Duranol violet 2R	30
	NC	Fast jet black 2BG	2,161
	NC	Fast jet black 2BR	7,164
	NC	Fast jet black BRE	1,025
	NC	Fast jet black 2BRE	4,366
	NC	Icyl blue GS	240
	NC	Icyl blue 2RS	60
	C	Icyl brown GS	240
	NC	Icyl orange RS	120
	NC	Icyl violet BS	120
	NC	Ionamine MAS	360
	NC	Ionamine orange CBS	180
	NC	Rigan blue 2R	1,981
	NC	Rigan blue 5R	660
	NC	Rigan green 3BL	110
	NC	Rigan green G	440
	NC	Rigan sky blue G	2,202
	NC	Setacyl brilliant pink G	441
	NC	Setacyl direct blue BS	1,102
	NC	Setacyl direct blue G supra	22
	NC	Setacyl direct blue G new supra I	37,482
	NC	Setacyl direct blue 2 GS	34,173
	NC	Setacyl direct blue LS	165
	NC	Setacyl direct blue RS	4,410
		Setacyl direct blue S2GS supra I	1,802
	NC	Setacyl direct blue green BS supra	55
	NC	Setacyl direct orange G	4,188
	NC	Setacyl direct orange 2R	19,844
	NC	Setacyl direct orange 3R	1,102

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		ARTIFICIAL SILK DYES—continued	
			Pounds
	NC	Setacyl direct orange S2R	3,859
	NC	Setacyl direct pink 3B	18,407
		Setacyl direct red BN supra	331
	NC	Setacyl direct red GBN supra	7,915
		Setacyl direct red SGBN	2,205
	NC	Setacyl direct rubine B	55
	NC	Setacyl direct violet B	6,158
	C	Setacyl direct violet R	8,800
	NC	Setacyl direct yellow 2G	801
	NC	Setacyl direct yellow GR supra	3,032
	NC	Setacyl direct yellow R	1,903
		Setacyl direct yellow 2R	110
	C	Setacyl direct yellow S2G	2,509
	NC	Visco blue E	396
	NC	Visco blue F	198
		Viscolan fast brown SR	176
	NC	Viscolan fast brown S2R	198
		RAPID FAST DYES	
	NC	Rapid fast blue B	40,500
	NC	Rapid fast Bordeaux IB	1,000
	NC	Rapid fast red B	400
	NC	Rapid fast red FGH	100
		Rapid fast yellow GH	1,700
	NC	Rapidazol black B	550
		Rapidazol blue IB	50
	NC	Rapidogen Bordeaux IB	325
	NC	Rapidogen Bordeaux R	15,150
	NC	Rapidogen brown IB	47,075
	NC	Rapidogen brown IRR	1,100
		Rapidogen brown R	200
	NC	Rapidogen corinth R	250
	NC	Rapidogen green B	7,400
	NC	Rapidogen olive brown IG	1,450
	NC	Rapidogen orange R	100
		Rapidogen red IR	3,325
	NC	Rapidogen red ITR	3,850
		Rapidogen red R	6,000
	NC	Rapidogen scarlet IL	100
	NC	Rapidogen violet B	6,800
	NC	Rapidogen yellow I3G	350
		BASIC DYES	
21	C	Chrysoidine RL base	5
133		Green JB	50
134	NC	Black JI	19,400
135		Blue JG	50
266	NC	Red JB	225
536	NC	Brown JR	375
656	NC	Auramine G	276
658		Rhoduline blue 6G 250	
658		Steoglaucine conc 1,985	
			2,235
661	NC	Turquoise blue G	100
662	C	Brilliant green crystals	556
663		Setocyanine 662	
663	NC	Setopaline conc 993	
			1,655
677	C	Magenta AB	3,050
678	C	Magenta A	300
680	C	Methyl violet NFB	3,700
681	C	Crystal violet	4,361
706	NC	Methyl Lyons blue 8,817	
706		Pure blue conc 100	
			8,917
728	C	Victoria blue R	1,059
729	C	Victoria blue B	110
731	NC	Night blue	75
749	NC	Rhodamine B extra (s. s.)	720
751	NC	Rhodamine 3B extra	50
752		Rhodamine 6G extra (s. s.)	1,250
786	NC	Auracine G	150
788	NC	Phosphine orange	110
789	NC	Patent phosphine M	110
793	NC	Phosphine O 500	
793	NC	Phosphine 3R 6,800	
			7,300

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934 as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		BASIC DYES—continued	*Pounds*
795	NC	Runic AL	2,250
815	C	Basic yellow T	1,750
815	C	Basic yellow TCN	2,150
			3,900
842		Methylene violet 3RA extra	50
845		Methylene heliotrope extra strong	150
924		Methylene green W	1,102
926		Thionine blue GO	400
927	C	New methylene blue N	600
	NC	Acridine brown ONL	550
		Acridine red brown O	441
	NC	Astra phloxine FF	650
	NC	Astra violet FFD	125
	NC	Brilliant rhoduline blue R	1,300
	NC	Copying black SK	125
	NC	Japan black MBG	4,250
	NC	Leather brown ET	7,900
	NC	Leather brown 5RTX	7,000
	NC	Methyl green 23S	20
	NC	Methylene blue BF	10
	NC	Phosphine brown L conc	55
		Rhodamine 6GDN extra (s. s.)	500
	NC	Rhoduline blue 5B	3,200
		Rhoduline sky blue 3G	250
	NC	Straw blue G	150
		SULFUR DYES	
	NC	Brilliant indocarbon CLB	25
	NC	Immedial brown W	1,150
	NC	Immedial chrome blue 5G	8,250
	NC	Immedial direct blue RL	4,550
	NC	Immedial new blue BL	5,000
	NC	Immedial new blue FBL	700
	NC	Immedial new blue G	10
		Immedial new blue 3GL extra	250
	NC	Immedial red brown CL3R	700
	NC	Immedial violet BB	25
		Immedial violet 3R	150
	NC	Immedial yellow brown G	10
	C	Indocarbon CL	10,400
	NC	Indocarbon CLG	7,550
	NC	Indocarbon IB	100
	NC	Indocarbon SN	3,800
	NC	Indocarbon SNR	3,500
	NC	Pyrogene blue green B	110
	NC	Pyrogene brown G	1,432
	NC	Pyrogene pure blue 3GL	10,801
	NC	Thional red brown 5R	8,951
	C	Thional red violet R	485
	C	Thionol brown OS	2,720
		COLOR-LAKE AND SPIRIT-SOLUBLE DYES	
	NC	Baykanol blue	1,000
		Baykanol Bordeaux	440
	NC	Baykanol Bordeaux DD	142
	NC	Baykanol red	110
		Baykanol rubine	165
		Baykanol yellow	185
		Fat blue Z	50
	NC	Frobeno brown RL	44
	NC	Grasol blue 2GS	220
	NC	Grasol blue R	770
	NC	Grasol fast black G	33
	NC	Grasol fast red BR	11
	NC	Grasol fast yellow 4GL	11
	NC	Grasol orange 2R	231
	NC	Grasol red B	11
	NC	Grasol yellow G	2
	NC	Grasol yellow 2G	11
	NC	Grasol yellow 2R	22
	NC	Green yellow soap color	75
	NC	Hansa green GS	1,800
		Hansa orange GG	2,100
	C	Hansa yellow A	950
	C	Hansa yellow 5G	400
	C	Hansa yellow 10G	1,090

[1] Competitive or noncompetitive.

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TABLE 15.—*Coal-tar dyes: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Colour index no.	Competitive status [1]	Name of dye	Quantity
		COLOR-LAKE AND SPIRIT-SOLUBLE DYES—continued	
			Pounds
	NC	Hansa yellow GR	400
	C	Helio Bordeaux BL	2,410
		Helio fast pink RL	220
	NC	Helio fast rubine 3BL	1,000
		Helio fast rubine 6BL	1,250
	NC	Helio fast rubine FF	1,050
	NC	Helio fast rubine RL	5
		Helio fast violet AL	250
	NC	Helio red RMT	800
		Lake black ROH	25
	NC	Nigrosine CS, waxoline	60
	NC	Onis 3B	1,250
	NC	Onis BN	450
	NC	Onis 5BN	50
	NC	Paper fast Bordeaux B	2,500
		Permanent orange G	200
	NC	Permanent red F4R	50
	NC	Permanent red F4RH	900
	NC	Permanent red FRL	175
	NC	Permanent red FRR extra	10
	NC	Permanent red toner NCR	125
	NC	Pigment deep black extra	2,000
	NC	Spirit fast red B	100
	NC	Spirit fast red 3B	10
	NC	Spirit fast red 5B	10
	C	Stone fast yellow G	475
		Stone fast yellow GGR	100
	NC	Sudan black BT	1,950
		Sudan black G	50
	NC	Sudan black RT	225
	NC	Sudan brown 3G	125
	NC	Sudan brown RRN	1,400
	NC	Sudan red B	25
	NC	Sudan red 7B	125
	NC	Sudan red GG	125
	NC	Sudan red R	125
	NC	Sudan yellow GR	300
	NC	Sudan yellow GRN	25
	NC	Sudan yellow RR	325
	NC	Zapon fast black M	150
	NC	Zapon fast black NC	1,625
	NC	Zapon fast blue G	35
	NC	Zapon fast blue 3G	175
	NC	Zapon fast brilliant red B	10
	NC	Zapon fast fire red B	15
	NC	Zapon fast green GG	450
	NC	Zapon fast orange G	1,750
	NC	Zapon fast orange RR	450
	NC	Zapon fast red CB	650
	NC	Zapon fast scarlet CG	225
	NC	Zapon fast scarlet CR	500
	NC	Zapon fast violet BB	30
	NC	Zapon fast violet CRR	5
	NC	Zapon fast yellow CGG	800
	NC	Zapon fast yellow GR	3,350
		MISCELLANEOUS UNCLASSIFIED DYES	
875	C	Fur blue black A, SB	3,050
875	[2] NC	Fur brown NZD, PR, RH, RHG, RR, SK, SO	3,425
875	[2] NC	Fur dye DG, GG	160
875	NC	Fur gray ALA, B, BC, DMG	875
875	[2] NC	Fur gray brown SLA	75
875		Fur red 3R	50
875	[2] NC	Fur yellow 4G, 4GL	973
875	NC	Fuscamine G	800
		All other	893
		Total:	
		Quantity	3,392,717
		Value	$5,035,325

[1] Competitive or noncompetitive. [2] Duty based on foreign value.

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TABLE 16.—*Coal-tar aromatic chemicals: Detailed statistics of imports into the United States in 1934 as obtained from invoice analyses*

Competitive status [1]	Name of chemical	Quantity	Competitive status [1]	Name of chemical	Quantity
		Pounds			*Pounds*
NC	Acetanisol	18	C	p-Methyl acetophenone	5
C	Acetyltoluene	9	C	Methyl anthranilate	4,074
C	Amyl benzoate	11	NC	Methyl benzoate	77
C	Amyl cinnamic aldehyde	233	C	Methyl cinnamate	250
C	Amyl salicylate	324	C	Methyl p-cresol	10
C	Anisic aldehyde	174	C	Methyl methyl anthranilate	365
C	Benzalacetone	40	NC	Methyl naphthyl ketone	1,345
C	Benzyl acetate	1,521	NC	Methylethyl phenylethyl carbinol	3
C	Benzyl benzoate	850			
C	Benzyl butyrate	20	C	Methylphenyl acetate	239
C	Benzyl cinnamate	35	C	Methylphenyl carbinol acetate	510
C	Benzyl formate	139	NC	Moskene	440
C	Benzyl isoeugenol	51	C	Musk C	17
C	Benzyl propionate	228	C	Musk CLG	8
C	Benzyl salicylate	34	C	Musk K	100
NC	Bromstyrol	1,395		Musk ambrette	25
NC	Buttarom	2	C	Musk ambrette residue	150
NC	Cetone V	4	C	Musk ketone	26
NC	Cetone X	2		Musk xylol	100
C	Cinnamic acid ethylester	80	NC	Neolavendiol	125
C	Cinnamic alcohol	1,356	C	Nerolin	638
C	Cinnamyl acetate	76	NC	Orangeol A	75
C	Coumarin	2,100		Orangeol B	10
C	p-Cresol acetate	50	C	Phenyl benzoate	40
C	p-Cresol methyl ether	325	C	Phenylacetic acid	187
C	p-Cresol phenylacetate	3	C	Phenylacetic aldehyde	170
	m-Cresyl methyl ether	829	C	Phenylethyl acetate	11
NC	Cyclamal	15	C	Phenylethyl alcohol	819
C	m-Diamino anisol	780	C	Phenylethyl butyrate	8
C	Diethyl phthalate	523	C	Phenylethyl formate	11
NC	Dimethylbenzylcarbinol and acetate.	12	NC	Phenylethyl isobutyrate	35
			C	Phenylethyl phenylacetate	25
C	Diphenyl oxide	122	C	Phenylpropyl acetate	22
C	Ethyl anthranilate	3	NC	Phenylpropyl alcohol	188
C	Ethyl methyl phenyl glycidate (Aldehyde C 16)	123	NC	Phenylpropyl aldehyde	31
			NC	Rosacetol	66
C	Ethyl vanillin	375	NC	Rosamen	20
NC	Floranol	50	NC	Skatol	1½
C	Flosal	447	C	Styrallyl acetate	25
	Floxine	20	C	Styrallyl alcohol	10
C	Heliotropine	902	C	Vanillin	125
C	o-Hydroxy benzaldehyde	551	NC	Vertena D	55
NC	Indol	319	C	Wintergreen pure	26
	Isobutyl acetate	25		All other	37
	Isobutyl benzoate	25			
C	Isobutyl salicylate	25		Total:	
NC	Isopropyl ester of p-hydroxy benzoic acid.	7		Quantity	24,739½
				Value	$48,824
NC	Ketone alpha	2			

[1] Competitive or noncompetitive.

TABLE 17.—*Coal-tar medicinals and pharmaceuticals: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*

Competitive status [1]	Name of product	Quantity	
		Pounds	Ounces
NC	Aminarsan	5	
C	p-Aminobenzoyldiethylaminoethanol hydrochloride	14	
NC	Antimony pyrocatechol sodium disulfonate	278	
C	Antipyrine	2	
C	Argeol	86	
NC	Arsaminol	5	
NC	Asthma capsules	8	
C	Benzaldehyde	400	
C	Benzoic acid	101	
NC	Bismuth benzoate	4	

[1] Competitive or noncompetitive.

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TABLE 17.—*Coal-tar medicinals and pharmaceuticals: Detailed statistics of imports into the United States in 1934, as obtained from invoice analyses*—Continued

Competitive status[1]	Name of product	Quantity	
		Pounds	Ounces
C	Bismuth subsalicylate	198	
C	Bismuth tribromphenate	200	
NC	Butyl-hydroxycinchoninic acid diethylethylene diamid	253	
	Butyl salicylate	25	
NC	Carbaminic acid ester of p-oxyphenylmethane	11	
NC	Cardiazol powder	22	
	Carvacrol	2,125	
	Chinosol tablets	55	
C	Chlorquinol	2	
C	Cinchophen	4,900	
C	Colchicine salicylate	1	
NC	Cuminic aldehyde	3	
NC	3:6-Diamino-10-methylacridine chloride solution	14	
NC	n-Diethylleucinol-ester-aminobenzoic acid	7	
C	Dimethylamino antipyrine	22	8
NC	Dimol	60	
NC	Dioxyanthranol	8	
NC	Euphthalmine hydrochloride	3	
C	Fluorescein	3	
NC	Germanin	1	
NC	Glemsas lozenges	29	
NC	Glycero guaiacol ether	176	
C	Glycin	25	
C	Guaiacol acetate	11	
NC	Hexamethylentetramine sulfosal	110	
C	Homatropine hydrobromide	1	
C	Iodoxyquinoline sodium sulfonate	18	
NC	Iopax	6	8
NC	Liantral	22	
NC	Mercurysalicylallylamino-o-acetate (sodium salt)	110	
C	Methansulfonate of alkylaminoalkylaminoacridine		4
NC	2-Methoxy-6:9-dichloracridine	1,212	
NC	2-Methoxy-6:9-dichloracridine phosphate	230	
NC	Methyl-p-hydroxybenzoate	202	
NC	Methylene bismethyl aminoantipyrine	250	
NC	Methylphenyl glycidate	10	
NC	b-Naphthol aluminum disulfonate	11	
C	Neoarsphenamine	12	6
C	Neocaine	25	
NC	Neocarmin	44	
NC	Neotonocain II	22	
NC	Neptal	8	
NC	Nirvanol tablets	3	
NC	m-Oxy-n-ethyldiethylaminoethyl-aminobenzolhydrochloride-m-oxy-phenylpropanolaminehydrochloride .5% sol	6	
NC	Phenacetol	75	
NC	Phenol belladona compound	91	
NC	Phenyldihydroquinazolin tannate	5	
NC	1-Phenyl-2:3-dimethyl-4-isopropylpyrazolon	44	
NC	Phenylethyl malonyl methyl urea	10	
C	Phloroglucin	22	
NC	Salenal	7	
NC	Salicylic ester of dihydroxethane	453	
NC	Sodium diiodo-p-phenolsulfonate	4	
C	Sodium salicylate	684	
NC	Togal	19	
C	Tophosan	24	
NC	Tricresol	685	
NC	Tyramine ethanesulfonate	1	
C	Universal indicator	110	
NC	Uraseptine	173	
	Vaselicyl	7	
NC	Vioform powder	298	
	All other	16	
	Total:		
	Quantity	14,089	
	Value	$68,532	

[1] Competitive or noncompetitive.

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TABLE 18.—*Coal-tar intermediates, photographic developers, and other coal-tar products: Detailed statistics of imports into the United States in 1934 as obtained from invoice analyses*

Competitive status [1]	Name of product	Quantity	Competitive status [1]	Name of product	Quantity
		Pounds			*Pounds*
NC	Aceto acetate-m-xylidid	331		4-Chloro-2-nitrotoluene	22,028
	Aceto acetic-o-anisidine	500		Chloro-p-xylolthioglycolic acid	2,330
	Acetyl-1:4-naphthylene diamine-6-sulfonic acid	6,725	NC	Chloro-p-xylyl sulfochloride	35,451
NC	Activol	10		m-Chlorotoluene	1,102
NC	Adipic acid	13,068		o-Chlorotoluene	10,624
NC	Adrenalin-racemic	1		Chloroxanis	1,844
NC	Albatex WS	550	NC	Coal-tar product similar to naphthalene diluted with polymerized ethylene oxide	11,899
NC	Albatex WSC	2,425			
NC	Alizarin colorant	3			
NC	Alkydal	66	NC	Copalit	4,574
	b-Aminoanthraquinone	56	NC	m-Cresol	21,054
	Aminoazobenzene	1,772	NC	o-Cresol	25,865
	Aminoazobenzene disulfonic acid	4,625	NC	p-Cresol	38,935
			NC	Cresylic acid	8,969
	Aminoazotoluene	3,000	NC	Cresyntan	384
	p-Amino benzoic acid	1,515	NC	Cyclohexanone	808
NC	Aminobenzol sulfonyl compound of benzidine ammonium sulfonate	56,462	NC	Cyclohexenyl ethyl cyanacetic acid methyl ester	1,322
			NC	Cyclohexenyl methyl cyanacetic acid methyl ester	2,645
C	p-Amino-diphenylamine hydrochloride	180	NC	Cyclohexylamine	405
[2] NC	4-Aminodiphenylamine-2-methoxy-2-sulfonic acid	4,398	NC	Cyclonol	5,278
				Decalin	380
[2] NC	Aminohydroxy arsenic acid	441	[2] NC	Dehydro toluidine disulfonic acid	1,508
NC	Amino methoxy diphenylamine	4,168	C	Dehydrothio toluidine mono sulfonic acid	2,332
	p-Amino methyl acetanilid	1,201			
NC	1-Amino-8-naphthol-3: 6-disulfonic acid	313	[2] NC	Developer OFS	55
			C	1:5-Diamino anthraquinone	13
	1-Amino-2-naphthol-ethylether	1,144		4:4-Diamino diphenylamine-2-acid	3,239
C	2-Amino-5-naphthol-7-sulfonic acid	34,266	NC	p-p-Diamino-diphenylamine chlorohydrate	24
NC	m-Aminophenol	1,004			
NC	p-Aminophenol hydrochloride	50		p-p-Diamino-diphenylamine sulfonic acid	1,552
NC	2-Aminophenol-4-sulfonic acid	11			
[2] NC	2-Amino-resorcinol	2	NC	Diaminophenol	25
NC	Anone	6,342	NC	Diaminophenol hydrochloride	410
	Anthracene	315	NC	Diazo compound	1,983
	Anthraflavinic acid	5,003		Diazo salts:	
NC	Antinonnin	495	[2] NC	Azo blue salt BB	64,521
NC	Antioxidant MB	220	[2] NC	Azo blue salt RR	6,395
C	Asplit solution	1,602	[2] NC	Azo orange salt GC	3,683
NC	Bakelite moulding compound	50		Azo red salt KB	443
C	Bakelite moulding material	900	[2] NC	Azo red salt KBS	82,685
	Benzanthrone sulfide	7,534	[2] NC	Azo red salt RC	27,937
C	Benzidine	50		Diazo salt BB	3,074
	Benzidine sulphon disulfonic acid	573		Diazo salt G	11,433
				Diazo salt GS	7,810
NC	Benzo sulfonate of soda	3,506		Diazo salt ST	2,215
NC	Benzoic acid and p-chlorobenzoic acid	55	NC	Fast black salt B	3,900
			NC	Fast black salt G	9,400
NC	Benzoquinone	4,600	NC	Fast black salt K	2,150
NC	Benzoyl peroxide	110	NC	Fast blue salt BB	30,682
	Benzoylamino hydroquinone ether	3,250	NC	Fast blue salt RR	1,500
			NC	Fast corinth salt LB	300
	Bromamine acid	5,105	NC	Fast garnet salt GBC	1,150
NC	Bromo isatin	20	NC	Fast garnet salt GC	25
[2] NC	Camphoric acid	11	NC	Fast orange salt GC	8,178
C	Carbazol	4,002	NC	Fast orange salt GR	1,992
NC	Carbazol-oxynaphtol	25	NC	Fast orange salt LG	350
NC	Chemical compound N	1,400	NC	Fast orange salt R	550
	Chemical compound NK	1,100	NC	Fast orange salt RD	3,100
NC	Chemical compound ON	25	NC	Fast red salt AL	15,400
[2] NC	2-Chloro-5-aminobenzoic acid	783	NC	Fast red salt GG	8,350
	Chloroaminophenol	2,125	NC	Fast red salt ITR	2,600
	Chloroaminophenol sulfonic acid	8,155	NC	Fast red salt KB	8,850
			NC	Fast red salt RC	9,602
NC	4-Chloro-2-anisidine	1,604	NC	Fast red salt RL	4,050
NC	p-Chloro-m-cresol	27,195	NC	Fast red salt TR	28,650
NC	Chloro metanilic acid	103	NC	Fast scarlet salt G	1,150
	p-Chloro-o-nitroaniline	2,350	NC	Fast violet salt B	1,550
	4-Chloro-2-nitroaniline	5,000			

[1] Competitive or noncompetitive.

[2] Duty based on foreign value.

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TABLE 18.—*Coal-tar intermediates, photographic developers, and other coal-tar products: Detailed statistics of imports into the United States in 1934 as obtained from invoice analyses*—Continued

Competitive status[1]	Name of product	Quantity
		Pounds
NC	Fast yellow salt GC	2,850
	5:5-Dibenzoylamino-1-dianthrimid	2,992
NC	Dichloroanthraquinone	280
NC	Dichlorobenzaldehyde	3,429
	Dichlorobenzidine	2,303
	Dichloronitraniline	772
NC	Dicyclopentadien	11
NC	Diethyl diphenyl urea	4,000
	Diethylamino benzaldehyde	2,249
[2]NC	n-Diethylaminoisopentyl-8-amino-6-methoxyquinoline	132
NC	Dihydro diaminoanthraquinone	53
NC	Dimethyl-m-aminophenol	10
	Dinaphthyl dicarbonic acid	9,459
NC	Dinitro acetanilide	4,033
C	Dinitro stilbene disulfonic acid	22,168
	o-Dinitrobenzene	19,052
NC	3:4-Dioxyaminopropiophenon	4
NC	3:4-Dioxyaminopropiophenon hydrochloride	11
NC	2:7-Dioxynaphthalene	19
	1:3-Diphenyl naphthylene-diamine-8-sulfonic acid	10,100
NC	Diphenylamine	10
NC	Dispersing agent SS	51,895
	Dissolving salt B new	2,700
NC	Erional CL	720
	Ethyl-a-naphthylamine	1,000
NC	Ethyl-b-naphthylamine	150
NC	Ethylbenzyl aniline sulfonic acid	112
	Ethylbenzyl-m-toluidine	29,492
NC	Eunaphtol AS	3,050
NC	Fast black LB base	2,400
NC	Fast blue BB base	2,250
	Fast blue RR base	50
C	Fast garnet GBC base	850
NC	Fast garnet GC base	500
	Fast garnet GR base	25
NC	Fast orange GC base	1,100
NC	Fast red B base	6,182
	Fast red ITR base	200
	Fast red KB base	8,175
NC	Fast red RBE base	1,725
NC	Fast red RL base	1,550
NC	Fast red TR base	3,150
C	Fast scarlet G base	18
NC	Fast scarlet TR base	350
	Fast violet B base	100
NC	Fixanol	4,196
	Formyl-m-diamino diphenyl urea	1,160
	Formyl-m-phenylene diamine	595
NC	Fouramine A	100
NC	Fouramine AL	400
NC	Fouramine BA	300
NC	Fouramine DMG	200
NC	Fouramine ERN	130
NC	Fouramine FRN	50
NC	Fouramine 4J	400
NC	Fouramine LO	200
NC	Fouramine NZ	500
NC	Fouramine ON	20
NC	Fouramine 2R	600
NC	Fouramine 3R	50
NC	Fouramine RHG	200
NC	Fouramine SK	100
NC	Fouramine SKG	100
NC	Fouramine SO	200
NC	Fur developer EG	300
NC	Fur developer ERN	25
C	Gardenal	6
NC	Goldamid	12
NC	Gris fouramine A	600
NC	Gris fouramine AL	700
NC	Gris fouramine AN	75
NC	Gris fouramine AT	75
NC	Haefelyt C rods	560
[2]NC	Hair dye (intermediate)	935
NC	Hertolan	500
NC	Humectol C	1,650
NC	4-Hydroxy-3-amino-phenyl arsenic acid	25
NC	m-Hydroxybenzaldehyde	11
NC	Hydroxybenzoic acid ester and chlorinated phenols	220
C	b-Hydroxy naphthoic acid	53,509
	p-Hydroxyphenyl-b-naphthylamine	8,167
	Hydroxyphenylamino carbazole	2,134
NC	8-Hydroxyquinoline-5-sulfonic acid	332
NC	Intermediate VI L	13
NC	Invadin C	220
NC	Invadin N	11,553
[2]NC	Iodone	525
NC	Isolemail PM noir	507
NC	p-Isopropyl methyl cinnamic aldehyde	209
	Katanol	800
	Katanol LF	25
NC	Katanol O	8,100
NC	Katanol ON	400
NC	Katanol W	40,900
NC	Katanol WL	17,500
NC	Kollamine	10,858
NC	Laventine HW	5,191
	Laventine KB	250
	Lenocal	900
	Lenocal AL	25
NC	Leonil S	14,750
NC	Leukanol L	55
C	Leukanol X	110
NC	Liquid soap	77
NC	Mabolit FF	440
NC	Membranit	36
C	Methyl-p-aminophenol	2,000
	3-Methyl-4 : 4-diamino diphenylamine	922
	3-Methyl-4: 4-diamino diphenylamine-2-sulfonic acid	915
NC	Methyl quinoline	2,988
NC	Methylcyclohexanon	27,769
	Mono ethyl-a-naphthylamine	4,250
C	Monometh	100
[2]NC	Monomethyl aminoaceto pyrocatechol hydrochloride	15
C	Monomethyl-p-aminophenol sulphate	50
NC	Mordant M	25
NC	Mordant W	120
NC	Naphthalene	121
	Naphthalene-1:6-disulfonic acid	3,596
NC	Naphthol AS-BG	2,750
C	Naphthol AS-BO	9
NC	Naphthol AS-G	39,756
NC	Naphthol AS-GR	650
NC	Naphthol AS-ITR	600
NC	Naphthol AS-LB	25,550
NC	Naphthol AS-LG	6,800
NC	Naphthol AS-L3G	700
NC	Naphthol AS-L4G	75
NC	Naphthol AS-LT	225
C	Naphthol AS-RL	495

[1] Competitive or noncompetitive.

[2] Duty based on foreign value.

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TABLE 18.—*Coal-tar intermediates, photographic developers, and other coal-tar products: Detailed statistics of imports into the United States in 1934 as obtained from invoice analyses*—Continued

Competitive status [1]	Name of product	Quantity	Competitive status [1]	Name of product	Quantity
		Pounds			*Pounds*
NC	Naphthol AS-SG	6,600	NC	Red yellow dyestuff	1½
NC	Naphthol AS-SR	2,350		Resins, synthetic, miscellaneous	202
C	Naphthol AS-SW	25	NC	Resist for acetate silk powder	350
NC	Naphthol AS-TR	4,850	NC	Resolin PV	439
C	b-Naphthol	150	NC	Rodine base	32
C	b-Naphthol monosulfonic acid F	1,250	C	p-Rosaniline	2,002
	1:3 Naphthol sulfonic acid	1,508		Rubber antioxidant MB	165
NC	1-Naphthol-5-sulfonic acid	181	NC	Sapamine KWC	3,968
	Naphthoresorcinol	2	NC	Saprotin A	397
	2:1-Naphthoxy thio naphthene	37,167	NC	Sensitizers	2,092
	Naphthoxy thiophen	9,821	NC	Servital SP	25
	a-Naphthylamine sulfaminic acid	14,947	NC	Setacyl salt A	110
	Naphthylamine sulfonic acid	2,000	NC	Setamol WS	3,700
C	2:1-Naphthylamine sulfonic acid	5,250	NC	Shirlan NA	110
C	1-Naphthylamine-6-sulfonic acid	15,450	NC	Siderophil	236
NC	Neolan salt II	3,237	C	Sipalin AOM	876
	p-Nitroaniline-o-sulfonate ethyl anilid	5,968		Solbrol M	75
NC	p-Nitro-o-anisidine	9,917		o-Sulfanilic acid	3,062
	5-Nitro-2-anisidine	10,001		o-Sulfobenzaldehyde	4,847
	4-Nitro-2-anisidine hydrochloride	23,613	[2] NC	Sulfureted benzanthrone carbonic acid	17,443
[2] NC	p-Nitro benzoic acid ethyl ester	3,500		Sulfureted chlorotolyl acid amide	6,159
	p-Nitro benzoyl chloride	5,071		Sulfureted phenetol carbonic acid amide	6,405
NC	Nitro carbazole	205	NC	Tanigan LLB	332
[2] NC	m-Nitro-p-hydroxy methyl benzoic acid	441	NC	Tanigan LLV	110
[2] NC	Nitro-oxalyl-diamino-anthraquinone	115,973	NC	Tetrachlorophthalic acid	791
NC	Nitro phenyl paramine acid	159		Tetraethyl diamino benzophenone	11,306
	Nitroso diaphenylamine	19,307	NC	Thiotan MS	10,010
NC	Oxalyl diamino anthraquinone	96	NC	Thiotan RS	19,018
NC	Oxy serol	20		p-Toluidine	11
	Oxyethyl methylaniline	2,464		3:3-Toluidine-6:6-disulfonic acid	2,730
	Oxyethyl toluidine	1,000	NC	m-Toluidine sulfonic acid	129
NC	Oxyethyloxy anthraquinone	53		m-Toluidine sulfonic calcium salt	3,871
NC	Pan yellow dyestuff	22		2:6-Toluylene diamine-4-acid	906
C	Paratol FF extra	4,000		Transketon	51,232
C	Phenanthrene	4	NC	Transparol	22
	Phenyl-2-amino-5-naphthol-7-sulfonic acid	1,310		Tri (p-nitrobenzol) stilbene disulfonic acid	634
	Phenyl-2-amino-8-naphthol-6-sulfonic acid	7,644	C	Trolitul black	200
NC	Phenyl mercury acetate	200	C	Trolitul injection moulding powder	200
	Photographic developers, miscellaneous	1,407	NC	Tunguran A	300
	Polyanthraquinonyl tetramid	4,286	NC	Variamine blue salt B	68,300
C	Polystyrol	991	NC	Variamine blue salt BA	25
NC	Preparation 6013	881		Variamine blue salt FG	100
NC	Preventol liquid I	672	NC	Variamine blue salt RT	7,900
NC	Preventol liquid II	220	NC	Variamine blue salt RTA	25
NC	Prophylin serol	17	NC	Vat brown R base	12,432
	p-Propoxy benzoic acid	12		Vat golden orange 3G base	4,207
NC	p-Propyl benzoic acid	5	NC	p-Xylidine	5,838
NC	Propyl-p-hydroxybenzoate	487		1:3:4-Xylidine-5-sulfonic acid	864
	Purpurin	25,542		All other	272
	Quinizarin	6,599		Total:	
				Quantity	1,918,888
				Value	$1,889,163

[1] Competitive or noncompetitive.

[2] Duty based on foreign value.

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PART V

UNITED STATES PRODUCTION AND SALES OF SYNTHETIC ORGANIC CHEMICALS OF NON-COAL-TAR ORIGIN, 1934

The progress made by this comparatively new industry is shown by the unusual increases in production reported practically every year. Increases exceeding 100 percent in 1934, as compared with 1933, occurred in the output of isopropyl alcohol, synthetic rubber, ethylene glycol, ethylene chlorohydrin, and ethylene oxide. More than 50 percent increase in output is reported for synthetic camphor, citric acid, crotonaldehyde, ethylene dibromide, ethylene dichloride, ethylidine diacetate, isopropyl acetate and trichloroethylene. Increases exceeding 25 percent are reported for ethyl alcohol, tetraethyl lead, acetic acid, methanol, and carbon tetrachloride.

Among the medicinals, derivatives of barbituric acid show an increase of 65 percent in production and a decrease in unit value of sales from $8.05 per pound in 1933 to $5.25 per pound in 1934. Output of urea resins increased 7 percent and the price per pound dropped from 48 cents to 41 cents.

TABLE 19.—*Synthetic organic chemicals of non-coal-tar origin: United States production and sales, 1934*

[The numbers in the second column refer to the numbered alphabetical list of manufacturers printed on p. 78. An X signifies that the manufacturer did not consent to the publication of his identification number with the designated product. A blank in the third column indicates that the production figure cannot be published without revealing information in regard to the output of individual firms. A blank in the fourth and fifth columns indicates that the sales of the corresponding product cannot be published without revealing information in regard to the individual firms. The figures thus concealed are, however, included in the total]

Name of chemical	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
Grand total		*Pounds* 1,133,644,032	*Pounds* 639,352,653	$72,832,673	$0.11
INDUSTRIAL AND MISCELLANEOUS SYNTHETIC ORGANIC CHEMICALS					
Acetaldehyde	30, 61, 94, 129, X	62,523,259			
Acetaldol (aldol)	129				
Acetamide	88				
Acetic acid (100 percent)	94, 129, X, X				
Acetic anhydride (from all sources)	30, 52, 59, X, X	67,335,274	7,135,633	928,931	.13
Acetin	186, X				
Acetone	30, 43, 151		42,615,312	3,867,440	.09
Acetonitrile	59				
Acetyl chloride	88				
Aldehyde ammonia	53, X				
Aldehyde C-12	X				
Allyl alcohol	59, 60				
Allyl bromide	60				
Allyl caproate	X				
Allyl chloride	60				
p-Aminodimethylamine	4				
Amyl acetate, total		8,097,582	8,227,490	812,081	.10
Normal	53, 70, 151, 165, 188				
Secondary	166, X				
Iso	70, 134, X, X, X, X				

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TABLE 19.—*Synthetic organic chemicals of non-coal-tar origin: United States production and sales, 1934*—Continued

Name of chemical	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
INDUSTRIAL AND MISCELLANEOUS SYNTHETIC ORGANIC CHEMICALS—continued					
		Pounds	*Pounds*		
Amyl alcohol:					
Normal	53, 70, 151, 165				
Secondary	53, 165, 166, X				
Tertiary	165, X, X	1,062,996	826,308	$104,847	$.13
Iso	70, X, X, X				
Amylamines (mono, di, tri)	165				
Amyl butyrate	25, 70				
Amyl caproate	134, X				
Amyl laurate	X				
Anethol	51, 83, X				
Anisic aldehyde (aubepine)	51, X				
Bornyl acetate	X				
Butyl acetate, total		42,111,815	43,339,168	3,968,122	.09
Normal	30, 43, 53, 70, 123, 151, 188, 196.				
Secondary	166, X				
Iso	30, 53				
Butyl acetoacetate	30				
Butyl alcohol, total		49,082,406	36,456,719	3,144,579	.09
Normal	30, 43, 151, 196, X				
Secondary	166, X				
Tertiary	166, X				
Iso	30, 53				
Butyl aldehyde	30, 43				
n-Butyl bromide	59				
Butyl butyrate	70				
Butyl lactate	43				
Butyl propionate	70, 188, 196				
Butyl stearate	43, X				
n-Butyric acid	30, 134, 196				
Butyric anhydride	30				
Caffeine (synthetic)	120, 124				
Calcium citrate (fermentation)	145				
Calcium gluconate	X				
Calcium lactate	9, 37, 114, X				
Camphor, synthetic	53				
n-Caproic acid	114, 134				
Capryl butyric acid	68				
Capryl butyric ether	68				
Carbon bisulfide on methylene dipiperidine.	X				
Carbon tetrachloride	19, 30, 52, 130, 180, 195.	46,920,303	42,575,987	1,748,356	.04
Chloroacetic acid (mono)	52				
Chloroacetone	59				
Chlorobutanol	X				
Chloroform (tech. and USP)	19, 24, 52, 53	1,781,882	1,433,725	232,613	.16
Citral	25, 51, 53, 186, X, X, X, X.	15,020	13,150	28,914	2.20
Citric acid (fermentation)	145, X				
Citronellal	181, 186, 189, X				
Citronellol	68, 72, 118, 186, X, X	14,548	11,993	19,640	1.64
Citronellyl acetate	68				
Crotonaldehyde	30, 129				
Diacetone alcohol	43, 123				
Diacetyl	175				
n-Dibutylamine	53				
Dibutyl carbinol	X				
Dibutyl ether	30				
Dibutyl ketone	X				
Dibutyl tartrate	X				
Dichlorodifluoromethane	101				
Dichloroethyl ether	30				
Dichloromonofluoromethane	101				
Dichlorotetrafluoroethane	101				
Diethanolamine	30				
Diethylacetal (acetal)	X				
Diethylamine	199				
Diethyl succinate	X				
Diethyl sulfate	30				
Diethylene glycol	30				
Diethylene glycol diethyl ether	30				
Diethylene glycol monobutyl ether	30				

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TABLE 19.—*Synthetic organic chemicals of non-coal-tar origin: United States production and sales, 1934*—Continued

Name of chemical	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
INDUSTRIAL AND MISCELLANEOUS SYNTHETIC ORGANIC CHEMICALS—continued		*Pounds*	*Pounds*		
Diethylene glycol monobutyl ether acetate.	30				
Diethylene glycol monoethyl ether	30				
Diethylene glycol monoethyl ether acetate.	30				
Diethylene glycol monomethyl ether	30				
Diethylene oxide (dioxan)	30				
Dihydrovanillone	68				
Dihydroxy citronellic ketone	68				
Diisobutylene	166, X				
Dimethylamine	43, 53				
Dimethylglyoxime	6, 59				
Dimethyl ether	53				
Dimethyl sulfate	53				
Dipropyl ketone	30				
Epichlorohydrin	53				
Ethoxy acetic acid	X				
Ethylamine	22				
Ethyl acetate (85 percent)	30, 43, 53, 68, 70, 123, 134, 151, 188, X.	47,671,437	23,274,841	$1,662,126	$.07
Ethyl acetoacetate	30, X				
Ethyl alcohol (synthetic)	30				
Ethyl bromide	1, 52				
Ethyl butyl acetate	30				
Ethyl butyl alcohol	30				
Ethyl butyrate	25, 70, 134, X, X, X	28,079	23,923	17,179	.72
Ethyl caproate	134				
Ethyl carbonate	X				
Ethyl chloride (tech. and USP)	52, 53, 70, 73, X, X				
Ethyl chlorocarbonate	X				
Ethyl ether (tech., USP, and absolute).	30, 53, 114, X, X, X	8,183,999	6,800,671	1,445,200	.21
Ethyl ether of morpholine ethanol	30				
Ethyl formate	68, 70, 134, X, X				
a-Ethyl hexanal	30				
a-Ethyl hexanol	30				
a-Ethylhexyl acetate	30				
Ethyl isovalerate	134, X, X		564	1,069	1.90
Ethyl lactate	X				
Ethyl laurate	51				
Ethyl mercaptan	114				
Ethyl myristinate	68				
Ethyl oenanthate	51, 134, X				
Ethyl oxalate	70, X				
Ethyl oxyhydrate	68				
Ethyl pelargonate	25, 186				
Ethyl propionate	68, 70, 134, 188, X				
Ethyl valerate	68, 70, X, X	1,450	543	800	1.47
Ethyl vanillin. (See Coal-tar flavors.)					
Ethylene chlorohydrin	30				
Ethylene dibromide	27, 52, 62				
Ethylene dichloride	30, 52				
Ethylene glycol	30				
Ethylene glycol diacetate	30				
Ethylene glycol diethyl ether	30				
Ethylene glycol dimethyl ether	30				
Ethylene glycol monobutyl ether	30				
Ethylene glycol monoethyl ether	30				
Ethylene glycol monoethyl ether acetate (cellusolve acetate).	30, 70				
Ethylene glycol monomethyl ether	30				
Ethylene glycol monomethyl ether acetate (methyl cellusolve acetate).	30, 70				
Ethylene oxide	30				
Ethylidin diacetate	X				
Fatty acids (synthetic)	94				
Formaldehyde (40 percent)	53, 61, 84				
Formic acid (90 percent)	53, 191, X				
Furfural	153				
Furfuryl alcohol and derivatives	153				
Furoic acid and derivatives	153				
Furoyl chloride	88				
Gallic acid, tech	59, 114, X	117,608			

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TABLE 19.—*Synthetic organic chemicals of non-coal-tar origin: United States production and sales, 1934*—Continued

Name of chemical	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
INDUSTRIAL AND MISCELLANEOUS SYNTHETIC ORGANIC CHEMICALS—continued					
		Pounds	*Pounds*		
Geraniol	51, 53, 68, 72, 181, 186, 189, X, X, X, X, X, X.	185,741	162,784	$229,756	$1.41
Geranyl acetate	68				
Geranyl formate	68				
Glycol stearate	77				
Heliotropin	51, X, X		14,994	22,308	1.49
Heptaldehyde	X				
Heptyl aclohol	X				
Hexachloroethane	52, 53				
Hexamethylenetetramine	53, 84, 160				
Hexyl acetate (sec.)	X				
Hexyl alcohol (n., sec., and ter.)	30, X				
Higher acetates (above hexyl)	X				
Higher alcohols (containing more than five-carbon atoms).	53, X				
Higher ketones	53				
Hydroxylamine hydrochloride	6, 59				
Hydroxy citronellal	53, X				
Ionone	53, 120, 186, X, X				
Isoamyl butyrate	68, 134, X, X	7,094	7,460	5,972	.80
Isoamyl formate	68, 134, X, X		296	302	1.02
Isoamyl isovalerate	134, X				
Isoamyl propionate	68, X				
Isobornyl acetate	53				
Isobutyl butyrate	68				
Isododecane	166				
Isoeugenol	189, X				
Iso-octane	166				
Isopropyl acetate	30, 68, 188, X				
Isopropyl acetoacetate	30				
Isopropyl alcohol (isopropanol)	30, 188, X				
Isopropyl bromide	1				
Isopropyl ether	30				
Isopulegol (nitrated citronellol)	186				
Isopulegyl acetate (acetylized citronellol).	186				
Isovaleric acid	134				
Lactic acid:					
Technical	9, 37, X, X				
Edible	37, X, X, X				
Medicinal	37, X				
Lead dithiocarbamate	82				
Lead dimethyldithiocarbamate	199				
Linalyl acetate	68, X				
Linalyl formate	68				
dl-Malic acid	125				
Mesityl oxide	30				
Methanol (synthetic)	30, 43, 53, 61	85,564,775	66,450,839	3,188,604	.05
Methylamine	4				
Methylene chloride	53				
Methylene dipiperidine	X				
Methyl acetate	30, 129				
Methyl acetoacetate	30				
Methyl butyl ketone	X				
Methyl chloride	19, 53				
Methyl ethyl ketone	30, 166, X				
Methyl formate	53, 98				
Methyl isobutyl carbinol	30				
Methyl isobutyl carbinol acetate	30				
Methyl isobutyl ketone	30				
Methyl propyl ketone	166				
Methyl succinate	X				
Monoethanolamine	30				
Monomethylamine	53				
Morpholine	30				
Nonyl aldehyde	68				
n-Octyl alcohol	6, X				
Oxalic acid	137, 191, X, X	8,922,031	7,967,544	845,423	.11
Paracetaldehyde	129				
Paraformaldehyde	53, 84				

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TABLE 19.—*Synthetic organic chemicals of non-coal-tar origin: United States production and sales, 1934*—Continued

Name of product	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
INDUSTRIAL AND MISCELLANEOUS SYNTHETIC ORGANIC CHEMICALS—continued		*Pounds*	*Pounds*		
Pentachloroethane	53				
Perchloroethylene	53				
Piperidine	53, X				
Pipenitone	X				
Propionic acid	30, 196				
Propionic anhydride	30				
Propionyl chloride	88				
n-Propyl alcohol (propanol)	53				
n-Propyl bromide	59				
Propylene chlorohydrin	30				
Propylene diamine	22				
Propylene dichloride	30, 52				
Propylene glycol	30				
Propylene oxide	30				
Pyrogallol (pyrogallic acid)	59, 114, X	82,637	85,168	$126,325	$1.48
Rhodinol	68, 181, 186, 189, X, X, X, X.	3,374	2,420	34,518	14.26
Rubber, synthetic (duprene)	53				
Sebacic acid	6				
Sodium dibutyldithiocarbamate	X				
Sodium formate	53, 114, 191, X				
Sodium oxal acetate	X				
Sodium oxalate	191				
Succinic acid and anhydride	125, X				
Succinic peroxide	X				
Sulfated fatty alcohols, acids, etc. (gardinols, igepons, intramines.).	53, 74, 177				
Sulfoacetic acid	X				
Terpineol	53, X, X				
Terpin hydrate	83				
Terpinyl acetate	X				
Tetrabromoethane (acetylene tetrabromide).	52				
Tetrachloroethane (acetylene tetrachloride).	52, 53, 195				
Tetrachloroethylene	52				
Tetraethyl lead	53				
Tetraethylene glycol	30				
Tetramethylthiouramsulfide	X				
Tetramethylthiouramdisulfide	160, X, X				
Triacetin	X, X				
Trichloroethylene	30, 53, 195				
Trichloromonofluoromethane	101				
Triethanolamine	30				
Triethyl citrate	X				
Triethylene glycol	30				
Triethylene glycol dihexoate	30				
Triethylene glycol monoethyl ether	30				
Triethylene glycol monomethyl ether.	30				
Triethylene glycol monomethyl ether acetate.	30				
Triethylenetetramine	30				
Triethyltrimethylenetriamine	X				
Triisobutylene	X				
Trimethylamine	53				
Urea in urea-ammonia solution	53				
Vanillin. (See Coal-tar flavors.)					
Vinyl acetate	30				
Vinyl chloride	30				
Waxes, synthetic	53, 77, X				
Xanthates	7, 81, 160, X, X, X				
Zinc dibutyldithiocarbamate	X				
Zinc diethyldithiocarbamate	X				
Zinc dimethyldithiocarbamate	160, X, X	13,120	8,420	17,279	2.05
Zinc dithiocarbamate	82				
All other	53, 61				
Total			635,386,985	70,154,580	.11

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TABLE 19.—*Synthetic organic chemicals of non-coal-tar origin: United States production and sales, 1934*—Continued

Name of chemical	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
SYNTHETIC MEDICINALS OF NON-COAL-TAR ORIGIN		*Pounds*	*Pounds*		
Acetannin (tannigen) (tannyl acetate).	X				
Adenine sulfate	59				
Aminoacetic acid (glycocol) (glycine).	52, 53, 60, 143, 178	10,186	10,158	$39,607	$3.90
Amyl nitrite	59, 114, X				
Barbituric-acid derivatives, total		129,915	109,454	574,454	5.25
Allyl-isopropyl-acetyl carbamide.	86				
Calcium isopropyl ethyl barbituric acid and salts.	X				
Cyclohexenyl ethyl barbituric acid and salts.	X				
Dibromobarbituric acid and salts (dibromin).	X				
Diethylbarbituric acid and salts (barbital).	1, 86, X, X				
Diethyl ester of monoethyl-ethyl malonic acid.	1				
Isoamyl ethyl barbituric acid and salts.	109				
Monoethyl ethyl malonic acid	1, X				
Sodium diethylbarituric (barbital sodium).	86				
Sodium hexylethyl barbiturate (ortal sodium).	X				
All other derivatives of barbituric acid.	X				
Bromocamphor	52, 114				
Bromodiethylacetylcarbamide	X				
Calcium dibromobehenate	X				
Calcium iodobehenate	X				
Chaulmoogric ester	X				
Chloral hydrate	124, X				
Chloroform, USP. (See Chloroform, tech.)					
Chlorothymol	X				
Diethylbromoacetyl bromide (bromo acid).	X				
13-Dimethylxanthin sodium acetate	X				
Ether, absolute. (See Ethyl ether, tech.)					
Ethyl chloride, USP. (See Ethyl chloride, tech.)					
Ethyl ether, USP. (See Ethyl ether, tech.)					
Ethyl glycollic acid ester of menthol	X				
Ethylhydrocupreine hydrochloride (optochin).	X				
Ethyl iodide	59, 114, X		284	2,036	7.17
Ethyl malonate	1				
Ethyl nitrite	70, 114, X				
Ethylenediamine	22, 30				
Ethylenediamine hydrochloride	22, 30				
Gallic acid, USP	59, 114				
Glycerophosphoric acid and salts	84, 124				
Hexamethylenetetramineanhydromethylene citrate.	X				
Iodoform	114, 128, X				
Iodomethane sulfate sodium	X				
Lithium lactate	X				
Menthol, synthetic	X				
Methyl glyco cyanidine (creatinine).	59				
Methyl iodide	59, 114, X		293	1,652	5.64
Methylene citric acid	X				
Methylene iodide	X				
Pelviren acid	X				
Pyruvic acid	1				
Sodium-bismuth-thioglycollate (thiobismol).	X				
Sulfonethylmethane	114				
Sulfonmethane	114				

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TABLE 19.—*Synthetic organic chemicals of non-coal-tar origin: United States production and sales, 1934*—Continued

Name of chemical	Manufacturers' identification numbers (according to list on p. 78)	Production	Sales		
			Quantity	Value	Unit value
SYNTHETIC MEDICINALS OF NON-COAL-TAR ORIGIN—continued		*Pounds*	*Pounds*		
Tribromoacetyl aldehyde (bromal)	X				
Tribromoethanol	X				
Tribromomethane (bromoform)	52, 114				
Tribromotertiarybutyl alcohol (brometone).	X				
Trichloroacetic acid	52				
Trichlorotertiarybutyl alcohol (chloretone).	20, X				
Total			464,839	$1,186,948	$2.55
SYNTHETIC RESINS OF NON-COAL-TAR ORIGIN					
Derived from—					
Abalyn-hydrogen-nitrogen (hercolyn).	83				
Rubber (pliofilm)	X				
Terpenes	77				
Urea or thiourea	7, 48, 185, X, X, X	3,470,916	3,115,608	1,290,802	.41
Vinyl acetate	30				
Wood rosin-methyl alcohol (abalyn).	83				
Total			3,500,829	1,491,145	.43

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PART VI

RESEARCH WORK

Introduction

The synthetic organic chemicals industry maintained 129 separately organized research laboratories in 1934 as compared with 114 in 1933. About 1,350 technically trained research workers were employed at an average annual salary of $2,864 as compared with 1,060 workers averaging $3,118 in 1933. The net cost of research was $7,629,694 in 1934 as against $6,163,688 in 1933. This expenditure for research in 1934 is equivalent to 4.3 percent of the value of sales of all synthetic organic chemicals.

A break-down for coal-tar products and products not of coal-tar origin is shown below:

Coal-Tar Products

In 1934 there were 212 producers of dyes and other coal-tar products, of which 76 reported separately organized research laboratories. These laboratories employed 664 technically trained research workers in 1934 at an average annual salary of $3,016 as compared with 498 workers averaging $3,548 in 1933.

The gross cost of research was $4,170,328 and the net cost $3,809,546. The net cost represents 3.7 percent of the value of sales of all coal-tar products.

Synthetic Products not of Coal-Tar Origin

There were 628 technically trained research workers employed in the synthetic non-coal-tar chemical industry in 1934 at an average annual salary of $2,695. The gross cost of research was $3,566,810 and the net cost was $3,536,011. This net cost represents 4.9 percent of the total value of sales of all products in this class.

Coal-Tar and Non-Coal-Tar Products

Certain manufacturers producing synthetic products both of coal-tar and non-coal-tar origin were unable to separate their research costs. In this group were 57 research workers at an annual average salary of $2,944. The gross cost of research was $308,728 and the net cost $284,137.

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PART VII

APPENDIX 1

DYES AND OTHER COAL-TAR CHEMICALS—IMPORTS FOR CONSUMPTION, AND EXPORTS, 1934

The following tables are compiled from official statistics of imports and exports, as reported in Foreign Commerce and Navigation of the United States for 1934. For comparative purposes, table 20 shows total imports of each product in 1933 and 1934. Table 21 shows imports of these products in 1934 by countries, and table 22 shows exports by countries.

The slight discrepancy between the figures for imports of coal-tar products shown in part IV and those shown here may be explained as follows: The coverage of the invoice analyses by which the detailed imports of part IV are compiled is not always complete. The values shown in the invoice analyses are the invoice or foreign values, while the values shown in Foreign Commerce and Navigation of the United States, with respect to dutiable items, are the dutiable values based either on American selling price or United States value. Furthermore, the classifications in Foreign Commerce and Navigation reports are broader than in the detailed statistics shown in part IV.

TABLE 20.—*Coal-tar products: Imports for consumption in the United States, 1933 and 1934*

GROUP I.—CRUDES (FREE)

	1933		1934	
	Quantity	Value	Quantity	Value
Dead or creosote oil.....gallons..	18,587,894	$1,131,453	31,773,930	$2,835,235
Acenaphthene, fluorene, methylanthracene, methylnaphthalene.....pounds..	1,038	1,190	24,174	3,140
Anthracene, less than 30 percent pure.....do....	10,000	74	42,591	700
Benzene.....gallons..	1,300,070	166,178	1,172,571	143,461
Cresylic acid.....do....	649,851	178,824	842,766	284,051
Cumene and cymene.....pounds..	3,442	534		
Naphthalene, solidifying at less than 79° C.....do....	42,786,368	451,019	47,994,513	669,383
Pyridine.....gallons..	13,126	14,818	14,760	16,246
Toluene.....do....			10,070	3,021
Tar and pitch:				
Crude, coal, blast-furnace, oil-gas, and water-gas tar.....barrels..	99,655	134,234	103,043	187,317
Pitch of coal, blast-furnace, oil-gas, and water-gas tar.....do....	245	1,019	105	688
All other distillates, n. s. p. f. which yield in distilling below 190° C., a quantity of tar acids, less than 5 percent of the original distillate..pounds..	636,004	19,484	871,268	36,463
All mixtures of distillates or pitches in par. 1651, and all other products found naturally in coal tar, whether produced from coal tar or other source, n. s. p. f.....pounds..	100,323	3,301	86,120	3,353

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TABLE 20.—*Coal-tar products: Imports for consumption in the United States, 1933 and 1934*—Continued

GROUP II.—INTERMEDIATES[1] (DUTIABLE AT 40 PERCENT AD VALOREM AND 7 CENTS PER POUND)

	Quantity	Value	Duty	Equivalent ad valorem
Acids:				
Carbolic:				
Crystal (phenol) [2]—	*Pounds*			*Percent*
1933	3,440	$641	$249	38.8
1934				
Liquid (cresylic acid or cresol) [2]—				
1933	121,634	9,164	6,090	66.5
1934	23,964	1,497	1,138	76.0
Coal-tar acids, n. s. p. f.:				
1933	229,651	282,299	128,995	45.7
1934	148,359	182,655	83,447	45.7
Aniline oil and salt:				
1933	2,381	381	319	83.7
1934				
Anthracene, 30 percent or more pure:				
1933	2,648	1,772	894	50.5
1934	330	234	117	49.9
Benzanthrone, benzoquinone, benzidine, benzidine sulfate, and benzyl, benzal, and benzoyl chloride:				
1933	4,766	6,371	2,882	45.2
1934	2,175	2,867	1,299	45.3
Carbazole, 65 percent or more pure:				
1933	2,136	516	356	69.0
1934	4,000	2,035	1,094	53.8
Dimethylaminophenol, dimethylphenylbenzylammonium hydroxide, and dimethylphenylenediamine:				
1933				
1934	911	2,944	1,241	42.2
Diphenylamine:				
1933	10	20	9	43.5
1934	10	20	9	43.5
Metacresol, orthocresol, and paracresol, 90 percent or more pure: [3]				
1933	48,511	16,205	4,939	30.5
1934	124,598	34,361	11,233	32.7
Naphthalene, solidifying at or above 79° C.:				
1933				
1934	66	6	7	116.7
Naphthol, alpha and beta, not medicinal:				
1933	34,542	71,701	31,098	43.4
1934	78,870	235,120	99,569	42.3
Nitro-aniline, para and meta, nitrobenzene, nitronaphthalene, nitrophenylenediamine, nitrosodimethylaniline, nitrotoluene, and nitrotoluylenediamine:				
1933	20,598	5,680	3,714	65.4
1934				
Tolidine, toluene sulfochloride, toluene sulfonamide, tolylenediamine:				
1933	3	15	6	41.4
1934				
All similar products manufactured from the products, provided for in par. 27 or par. 1651:				
1933	1,388,739	1,141,962	553,997	48.5
1934	1,580,403	1,513,856	716,171	47.3

[1] Ad valorem rate based on American selling price or the United States value.
[2] Dutiable at 20 percent ad valorem and 3½ cents per pound.

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TABLE 20.—*Coal-tar products: Imports for consumption in the United States, 1933 and 1934*—Continued

GROUP III.—DYES AND OTHER FINISHED PRODUCTS (DUTIABLE AT 45 PERCENT AD VALOREM AND 7 CENTS PER POUND)

	Quantity	Value	Duty	Equivalent ad valorem
Colors, dyes, stains, color acids, color lakes, and color bases (standard strength):	*Pounds*			*Percent*
1933	4,877,243	$5,675,681	$2,895,463	51.0
1934	4,239,753	5,455,603	2,751,804	50.4
Coal-tar medicinals:				
Acetanilide, medicinal, acetphenetidin (phenacetin), and acetylsalicylic acid (aspirin):				
1933	232	173	94	54.4
1934	22	62	29	47.5
Arsphenamine (salvarsan), neoarsphenamine, and similar arsenical medicinal compounds:				
1933	1	576	259	45.0
1934	3	1,046	471	45.0
Benzoic acid, medicinal:				
1933	100	60	34	56.7
1934				
Guaiacol, including natural, and derivatives:				
1933	1,110	716	400	55.9
1934				
Novocain or procaine:				
1933	19	11,425	5,143	45.0
1934				
Phenolphthalein:				
1933	551	1,674	792	47.3
1934	645	2,229	1,048	47.0
Salicylic acid and its salts, medicinal:				
1933	372	585	289	49.5
1934	6	16	8	47.6
Coal-tar medicinals, n. s. p. f.:				
1933	17,421	68,993	32,266	46.8
1934	13,012	70,862	32,799	46.3
Other coal-tar products:				
Explosives, except smokeless powders (including picric acid and trinitrotoluene):				
1933	1,250	2,420	1,177	48.6
1934	1,000	2,000	970	48.5
Flavors and perfume materials:				
Musk, artificial, benzyl acetate, benzyl benzoate, coumarin, natural coumarin, diphenyl-oxide, heliotropine (from coal tar, T. D. 40998), methyl anthranilate, methyl salicylate, natural methyl salicylate or oil of wintergreen or oil of sweet birch, phenyl-acetaldehyde, phenylethyl alcohol, and other synthetic oderiferous or aromatic chemicals not containing alcohol:				
1933	52,522	127,586	61,090	47.9
1934	37,466	97,231	46,377	47.7
Vanillin:				
1933	1,766	22,691	10,335	45.6
1934	425	4,738	2,162	45.6
Other flavors:				
1933	6	10	5	49.2
1934				
Photographic chemicals:				
1933	11,884	34,726	16,459	47.4
1934	10,369	44,160	20,598	46.6
Synthetic phenolic resin and all resin-like products, prepared from any article provided for in pars. 27 or 1651 (bakelite prohibited, T. D. 41512):				
1933	3,776	2,508	1,393	55.5
1934	15,711	8,680	5,006	47.7
Synthetic tanning materials:				
1933				
1934	7,075	1,072	978	91.2

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TABLE 21.—*Coal-tar products: Imports for consumption in the United States, by countries, 1934*

Country	Dead or creosote oil		Acenaphthene, fluorene, methylanthracene, methylnaphthalene		Anthracene, less than 30 percent pure	
	Quantity	Value	Quantity	Value	Quantity	Value
	Gallons		*Pounds*		*Pounds*	
Belgium	9,439,236	$837,215	2,006	$190		
Germany			22,168	2,950	42,591	$700
Netherlands	1,780,363	155,818				
United Kingdom	15,972,884	1,477,028				
Canada	1,971,372	206,567				
New Zealand	4,500	408				
Japan	2,605,575	158,199				
Total	31,773,930	2,835,235	24,174	3,140	42,591	700

Country	Benzene		Cresylic acid		Naphthalene, solidifying at less than 79° C.	
	Quantity	Value	Quantity	Value	Quantity	Value
	Gallons		*Pounds*		*Pounds*	
Belgium					7,313,870	$90,424
Czechoslovakia					2,984,454	44,371
France			2,080	$799		
Germany			25,643	6,263	22,219,291	326,607
Netherlands					620,569	8,739
Poland and Danzig					5,765,530	89,002
U. S. S. R. (Russia in Europe)					1,049,831	12,569
United Kingdom			815,043	276,989	6,968,213	78,968
Canada	1,071,394	$129,040			1,072,755	18,703
Mexico	101,177	14,421				
Total	1,172,571	143,461	842,766	284,051	47,994,513	669,383

Country	Toluene		Pyridine		Crude coal, blast-furnace, oil-gas, and water-gas tar		Pitch of coal, blast-furnace, oil-gas, and water-gas tar	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Gallons		*Gallons*		*Barrels*		*Barrels*	
Germany			14,610	$15,732				
United Kingdom			150	514	951	$4,724	95	$653
Canada	10,070	$3,021			101,040	182,373		
New Zealand					52	220	10	35
Total	10,070	3,021	14,760	16,246	102,043	187,317	105	688

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TABLE 21.—*Coal-tar products: Imports for consumption in the United States, by countries, 1934*—Continued

Country	All other distillates, n. s. p. f., which yield in distilling below 190° C. a quantity of tar acids less than 5 percent of the original distillate		All mixtures of distillates or pitches in paragraph 1651, and all other products found naturally in coal tar, whether produced from coal tar or other source, n. s. p. f.	
	Quantity	Value	Quantity	Value
	Pounds		*Pounds*	
Germany	84,206	$6,361	10,580	$960
United Kingdom	626,312	27,833		
Canada	160,100	2,244	75,540	2,393
Finland	650	25		
Total	871,268	36,463	86,120	3,353

Country	Carbolic acid, liquid (cresylic acid or cresol)		Coal-tar acids n. s. p. f.		Anthracene, 30 percent or more pure		Benzanthrone, benzoquinone, benzidine, benzidine sulfate, and benzyl, benzal, and benzoyl chloride	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Pounds		*Pounds*		*Pounds*		*Pounds*	
Czechoslovakia			313	$212				
France			50	574				
Germany			121,772	143,516	330	$234	2,175	$2,867
Switzerland			25,353	37,470				
United Kingdom	23,464	$1,412	551	310				
Canada	500	85	320	573				
Total	23,964	1,497	148,359	182,655	330	234	2,175	2,867

Country	Carbazole, 65 percent or more pure		Dimethylaminophenol, dimethylphenylbenzyl ammonium hydroxide, and dimethylphenylenediamine		Diphenylamine		Metacresol, orthocresol, and paracresol, 90 percent or more pure	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Pounds		*Pounds*		*Pounds*		*Pounds*	
Germany	4,000	$2,035	911	$2,944	10	$20	8,928	$3,581
Switzerland							24,253	9,312
United Kingdom							91,417	21,468
Total	4,000	2,035	911	2,944	10	20	124,598	34,361

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TABLE 21.—*Coal-tar products: Imports for consumption in the United States, by countries, 1934*—Continued

Country	Naphthalene, solidifying at or above 79° C.		Naphthol, alpha and beta, not medicinal		All similar products manufactured from the products provided for in pars. 27 or 1651	
	Quantity	Value	Quantity	Value	Quantity	Value
	Pounds		*Pounds*		*Pounds*	
France					7,178	$16,697
Germany	66	$6	78,350	$233,257	1,504,146	1,440,341
Hungary					22	460
Italy					236	19
Switzerland					32,958	23,366
United Kingdom					33,598	29,227
Canada			520	1,863	1,999	3,147
Japan					266	599
Total	66	6	78,870	235,120	1,580,403	1,513,856

Country	Coal-tar colors, dyes, stains, color acids, color lakes, and color bases, n. s. p. f.		Acetanilide, medicinal, acetphenetidine (phenacetin) and acetylsalicylic acid (aspirin)		Arsphenamine (salvarsan) neoarsphenamine, and similar arsenical medicinal compounds		Phenolphthalein	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Pounds		*Pounds*		*Pounds*		*Pounds*	
Belgium	2,726	$2,313						
France	14,712	27,146						
Germany	2,010,784	2,824,678			3	$1,046		
Italy	310	427						
Netherlands	18,889	16,595						
Switzerland	2,131,491	2,521,333						
United Kingdom	51,718	51,445						
Canada	8,805	11,362	22	$62			645	$2,229
China	33	29						
Japan	285	275						
Total	4,239,753	5,455,603	22	62	3	1,046	645	2,229

Country	Salicylic acid and its salts, medicinal		Coal-tar medicinals, n. s. p. f.		Coal-tar explosives, except smokeless powders (including picric acid and trinitrotoluene)		Coal-tar flavors and perfume materials [1]	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Pounds		*Pounds*		*Pounds*		*Pounds*	
France			1,376	$9,166			6,164	$23,927
Germany			7,981	42,074			19,568	48,035
Hungary			46	183				
Italy			6	306				
Netherlands							2,438	4,819
Spain							716	484
Switzerland			1,024	12,557			8,528	19,686
United Kingdom			2,392	6,308			52	280
Canada	6	$16	43	31	1,000	$2,000		
Japan			144	237				
Total	6	16	13,012	70,862	1,000	2,000	37,466	97,231

[1] Includes musk, artificial, benzyl acetate, benzyl benzoate, coumarin, natural coumarin, diphenyloxide, heliotropin (from coal tar, T. D. 40,998), methyl salicylate, natural methyl salicylate or oil of wintergreen or oil of sweet birch, phenylacetaldehyde, phenylethyl alcohol, and other synthetic odoriferous or aromatic chemicals not containing alcohol.

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TABLE 21.—*Coal-tar products: Imports for consumption in the United States, by countries, 1934*—Continued

Country	Coal-tar flavors and perfume materials—Vanillin		Coal-tar photographic chemicals		Synthetic phenolic resin and all resin-like products [1]		Synthetic tanning materials	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Pounds		*Pounds*		*Pounds*		*Pounds*	
Belgium			4	$44				
Germany	425	$4,738	8,317	35,447	9,801	$5,303	7,075	$1,072
Netherlands			1,982	8,575				
Switzerland					3,473	2,621		
United Kingdom					1,065	255		
Canada			31	80	1,372	501		
Japan			35	14				
Total	425	4,738	10,369	44,160	15,711	8,680	7,075	1,072

[1] Prepared from any article provided for in pars. 27 or 1651 (bakelite prohibited, T. D. 41512).

TABLE 22.—*Coal-tar products: Exports from the United States by countries, 1934*

Country	Benzol		Crude coal tar		Coal-tar pitch		Creosote oil	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Gallons		*Barrels*		*Tons*		*Gallons*	
Belgium	1,494,366	$252,727	97,444	$218,652	8,652	$93,007		
France	5,237,209	873,095	325,359	763,983	127,208	1,619,254	261	$112
Germany	147,950	29,633	11,657	29,670	1	13		
Italy	146,463	35,060			371	6,474		
Netherlands	1,249,205	301,411	26,880	68,400	10,778	91,486		
Poland and Danzig	712,078	122,833						
United Kingdom	335,697	57,073			10,037	112,178		
Canada	53,595	8,517	15,968	47,438	3,349	35,713	69,894	10,844
Panama	607	675	208	1,647	3	102	19,795	4,088
Mexico	512	217	128	1,081	6	286	27,381	6,640
Cuba	51,008	9,835	588	7,249	14	295	5,553	1,352
Argentina	98,371	29,384	194	1,935			50	20
Colombia	240	135	162	1,270	410	6,485	61,856	15,910
Philippine Islands	51,144	13,184	20	160			811	219
Canary Islands	76,016	17,062						
All other	37,649	10,313	947	7,584	5,628	59,413	8,907	3,276
Total	9,692,010	1,761,174	479,555	1,149,069	166,457	2,024,706	194,508	42,461

Country	Coal-tar colors, dyes, stains, and color lakes		Other coal-tar products exclusive of medicinals	
	Quantity	Value	Quantity	Value
	Pounds		*Pounds*	
Belgium	1,193,630	$369,414	2,277,004	$165,908
France	23,154	34,355	1,056,548	72,680
Germany	105,380	50,273	1,463,390	116,683
Italy	119,677	125,775	4,484,555	111,850
Netherlands	392,595	108,513	3,914,547	291,984
United Kingdom	70,392	26,362	1,496,653	172,518
Canada	2,443,763	1,093,721	4,688,745	405,656
Mexico	562,864	251,503	368,402	71,510
Argentina	338,561	172,601	141,730	19,783
Brazil	207,497	136,533	552,114	66,140
British India	1,258,715	496,452	25,264	20,470
China	8,373,975	1,579,552	2,403,308	324,768
Hong Kong	354,833	87,170	110,143	70,772
Japan	540,382	392,814	1,965,053	353,840
Kwantung	962,680	154,351	103,512	11,129
Other countries	994,105	550,277	2,904,807	381,319
Total	17,942,203	5,629,666	27,955,775	2,657,010

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APPENDIX 2

Directory of manufacturers of dyes and other synthetic organic chemicals, 1934

No.	Name of company	Office address (location of plant given in parentheses if not in same city as office)
1	Abbott Laboratories	14th St. and Sheridan Road, North Chicago, Ill.
2	Alston Lucas Paint Co	Wade and Currier Sts., Chicago, Ill.
3	Althouse Chemical Co	540 Pear St., Reading, Pa.
4	Amalgamated Dyestuff & Chemical Works, Inc.	75 Hudson St., New York, N. Y. (Newark, N. J.).
5	American Aniline Products, Inc	50 Union Square, New York, N. Y. (Lock Haven, Pa.).
6	American Chemical Products Co	7 Litchfield St., Rochester, N. Y.
7	American Cyanamid Co	30 Rockefeller Plaza, New York, N. Y. (Linden, N. J.; Bound Brook, N. J.; Bridgeville, Pa.).
8	American Dyewood Co	100 E. 42d St., New York, N. Y. (Belleville, N. J.).
9	American Maize-Products Co	100 E. 42d St., New York, N. Y. (Roby, Ind.).
10	American Moulded Products Corporation.	1603 Geele Ave., Sheboygan, Wis.
11	American Resolin Corporation	25 Jay St., Brooklyn, N. Y.
12	Ansul Chemical Co	Foot of Stanton St., Marinette, Wis.
13	Apex Chemical Co., Inc	225 W. 34th St., New York, N. Y. (Elizabethport, N. J.).
14	Arnold, Hoffman & Co., Inc	55 Canal St., Providence, R. I. (Dighton, Mass.).
15	Artifex Products Co	Delaware Ave. and Elm St., Camden, N. J.
16	Barrett Co., The	40 Rector St., New York, N. Y. (plants throughout United States).
17	Bates Chemical Co., Inc	Scottdale Road, Lansdowne, Pa.
18	Beck, Koller & Co., Inc	601 Woodward Heights Blvd., Ferndale, Mich.
19	Belle Alkali Co	Belle, W. Va.
20	Benzol Products Co	237 South St., Newark, N. J. (Piscataway, N. J.).
21	Berkheimer Manufacturing Co., J. E.	Kenton Station, Portland, Oreg.
22	Bersworth Laboratories, F. C	609 Waverly St., Framingham, Mass.
23	Brooklyn Color Works, Inc	129-143 Cherry St., Brooklyn, N. Y.
24	Brown Co	404 Commercial St., Portland, Maine (Berlin, N. H.).
25	Bush & Co., Inc., W. J	11 E. 38th St., New York, N. Y. (Linden, N. J.).
26	Calco Chemical Co., Inc., The	Bound Brook, N. J.
27	California Chemical Co	220 Bush St., San Francisco, Calif. (Newark and Chula Vista, Calif.; South Charleston, W. Va.).
28	California Flaxseed Products Co	3135 E. 26th St., Los Angeles, Calif.
29	California Ink Co., Inc., The	545 Sansome St., San Francisco, Calif. (Berkeley, Calif.).
30	Carbide & Carbon Chemicals Corporation.	30 E. 42d St., New York, N. Y. (South Charleston, W. Va.; Niagara Falls, N. Y.).
31	Carus Chemical Co., Inc	1377 Eighth St., LaSalle, Ill.
32	Catalazuli Manufacturing Co., Inc	119-201 Twenty-second Ave., College Point, Long Island, N. Y.
33	Catalin Corporation of America	1 Park Ave., New York, N. Y. (Fords, N. J.).
34	Celluloid Corporation	290 Ferry St., Newark, N. J.
35	Chemical Manufacturing Co., Inc	Ashland, Mass.
36	Cincinnati Chemical Works, Inc	Evanston Station, box 20, Cincinnati, Ohio (Norwood and St. Bernard, Ohio).
37	Clinton Co	Clinton, Iowa.
38	Coe Laboratories, Inc	6033 Wentworth Ave., Chicago, Ill.
39	Colasta Co., Inc., The	Mechanic St., Hoosick Falls, N. Y.
40	Coleman & Bell Co., The	Main and Waverly Aves., Norwood, Ohio.
41	Collway Colors, Inc	15 Market St., Paterson, N. J.
42	Colt's Patent Fire Arms Co	Hartford, Conn.
43	Commercial Solvents Corporation	230 Park Ave., New York, N. Y. (Terre Haute, Ind.; Peoria, Ill.; Westwego, La.; Harvey, La.; Agnew, Calif.).
44	Commonwealth Color & Chemical Co.	Nevins, Butler and Baltic Sts., Brooklyn, N. Y.
45	Continental-Diamond Fibre Co	70 Chapel St., Newark, Del. (Bridgeport, Pa.).
46	Cooks Falls Dye Works, Inc	70 Pine St., New York, N. Y. (Cooks Falls, N. Y.).
47	Coopers Creek Chemical Co	River Road, West Conshohocken, Pa.
48	Crown Cork & Seal Co., Inc	Baltimore, Md.
49	Crown Tar Works (Public Service Co. of Colorado).	900 Fifteenth St., Denver, Colo.
50	Diarsenol Co., Inc	771-773 Ellicott Square, Buffalo, N. Y.
51	Dodge & Olcott Co	180 Varick St., New York, N. Y. (Bayonne, N. J.).
52	Dow Chemical Co., The	Midland, Mich.
53	du Pont de Nemours & Co., E. I	Wilmington, Del. (Carney's Point, N. J.; New Brunswick, N. J.; Carrollville, Wis.; Repauno, N. J.; Belle, W. Va.; Parlin, N. J.; Perth Amboy, N. J.; Niagara Falls, N. Y.
54	du Pont Viscoloid Co	626 Schuyler Ave., Arlington, N. J. (Leominster, Mass.).
55	Durite Plastics (division of Stokes & Smith).	Summerdale Ave. near Roosevelt Blvd., Philadelphia, Pa.
56	Dye Specialties Corporation	7 Bennett St., Jersey City, N. J.
57	Dyestuffs & Chemicals, Inc	11th and Monroe Sts., St. Louis, Mo.
58	Eakins, Inc., J. S. & W. R	55 Berry St., Brooklyn, N. Y.
59	Eastman Kodak Co	343 State St., Rochester, N. Y. (Rochester, N. Y., and Kingsport, Tenn.).
60	Edwal Laboratories, The	732 Federal St., Chicago, Ill.
61	Empire Oil & Refining Co	Bartlesville, Okla. (Tallant, Okla.).
62	Ethyl-Dow Chemical Co	Wilmington, N. C.
63	Farley & Loetscher Manufacturing Co.	7th and White Sts., Dubuque, Iowa.
64	Federal Color Laboratories, Inc	4633 Forest Ave., Norwood, Ohio.
65	Felton Chemical Co., Inc	599 Johnson Ave., Brooklyn, N. Y.
66	Fiberloid Corporation, The	Indian Orchard, Mass.
67	Fine Colors Co	21-29 McBride Ave., Paterson, N. J.

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Directory of manufacturers of dyes and other synthetic organic chemicals, 1934—Continued

No.	Name of company	Office address (location of plant given in parentheses if not in same city as office)
68	Florasynth Laboratories, Inc.	1513-1533 Olmstead Ave., New York, N. Y.
69	Foster-Heaton Co.	833-839 Magnolia Ave., Elizabeth, N. J.
70	Franco-American Chemical Works	95 Wall St., New York, N. Y. (Carlstadt, N. J.).
71	Fries Bros.	92 Reade St., New York, N. Y. (Bloomfield, N. J.).
72	Fries & Co., Inc., George G.	68 Beekman St., New York, N. Y. (11-25 Forty-fourth Road, Long Island, N. Y.).
73	Gebauer Chemical Co., The	826 Hanna Building, Cleveland, Ohio.
74	General Aniline Works, Inc.	1150 Broadway, New York, N. Y. (Albany, N. Y.; Grasselli, N. J.).
75	General Electric Co.	1 River Road, Schenectady, N. Y. (Bridgeport, Conn.; Pittsfield, Mass.).
76	General Plastics, Inc.	Walck Road, North Tonawanda, N. Y.
77	Glyco Products Co., Inc.	949 Broadway, New York, N. Y. (Brooklyn, N. Y.).
78	Goodrich Co., The B. F.	500 S. Main St., Akron, Ohio.
79	Goodyear Tire & Rubber Co.	1144 E. Market St., Akron, Ohio.
80	Grasselli Chemical Co., The	1400 Guardian Building, Cleveland, Ohio (Philadelphia, Pa.).
81	Great Western Electro-Chemical Co.	9 Main St., San Francisco, Calif. (Pittsburg, Calif.).
82	Hall Co., The C. P.	2510 First Central Tower, Akron, Ohio.
83	Hercules Powder Co.	Delaware Trust Building, Wilmington, Del.
84	Heyden Chemical Corporation	50 Union Square, New York, N. Y. (Garfield and Perth Amboy, N. J.).
85	Hilton-Davis Co., The	P. O. Box 8, Pleasant Ridge Station, Cincinnati, Ohio.
86	Hoffmann-LaRoche, Inc.	Nutley, N. J.
87	Holland Aniline Dye Co.	R. F. D. No. 4, Holland, Mich.
88	Hooker Electrochemical Co.	60 E. 42d St., New York, N. Y. (Niagara Falls, N. Y.).
89	Huggins & Son, James	239 Medford St., Malden, Mass.
90	Hynson, Westcott & Dunning, Inc.	1030 N. Charles St., Baltimore, Md.
91	Imperial Color Works, Inc.	P. O. Box 231, Glens Falls, N. Y.
92	Industrial Dyestuff Co.	Massasoit Ave., East Providence, R. I.
93	Inland Tar Co.	38 S. Dearborn St., Chicago, Ill. (Indiana Harbor, Ind.).
94	Jasco, Inc.	Care of Standard Oil Co. of Louisiana, Baton Rouge, La.
95	Jennison-Wright Co., The	2463 Broadway, Toledo, Ohio.
96	Joanite Corporation	1002 Forty-fourth Drive, Long Island City, N. Y.
97	Johnson & Co., Charles Eneu.	10th St. at Lombard St., Philadelphia, Pa.
98	Kay-Fries Chemicals, Inc.	180 Madison Ave., New York, N. Y. (West Haverstraw, N. Y.).
99	Kentucky Color & Chemical Co.	34th and Bank Sts., Louisville, Ky.
100	Kessler Chemical Corporation	Chrysler Building, New York, N. Y. (Philadelphia, Pa.),
101	Kinetic Chemical, Inc.	8114 Du Pont Building, Wilmington, Del. (Carney's Point, N. J.).
102	A. Knoedler Co.	717 N. Prince St., Lancaster, Pa.
103	H. Kohnstamm & Co., Inc.	87 Park Pl., New York, N. Y.
104	Koppers Products Co., Inc.	Koppers Building, Pittsburgh, Pa. (plants throughout the United States).
105	Krebs Pigment & Color Corporation	256 Vanderpool St., Newark, N. J.
106	LaMotte Chemical Products Co.	McCormick Building, Baltimore, Md.
107	Lavanburg Co., Fred L.	90 John St., New York, N. Y. (Brooklyn, N. Y.).
108	Lehigh Briquetting Co.	Universal Building, Fargo, N. Dak. (Lehigh (post office Dickinson), N. Dak.).
109	Lilly & Co., Eli	Indianapolis, Ind.
110	Lucidol Corporation	293 Larkin St., Buffalo, N. Y.
111	Lueders & Co., George	427 Washington St., New York, N. Y. (Brooklyn, N. Y.).
112	Macher & Son, Wm.	1533 W. Clearfield St., Philadelphia, Pa.
113	Makalot Corporation	262 Washington St., Boston, Mass. (Waltham, Mass.).
114	Mallinckrodt Chemical Works	3600 N. 2d St., St. Louis, Mo.
115	Marblette Corporation, The	37-21 30th St., Long Island City, N. Y.
116	Marietta Dyestuffs Co., The	402 Peoples Bank Building, Marietta, Ohio.
117	Marx Color & Chemical Co., Max	192-194 Coit St., Irvington, N. J.
118	Maschmeijer, Jr., Inc., A.	43 W. 16th St., New York N. Y. (Newark, N. J.).
119	May, Inc., Otto B.	198-212 Niagara St., Newark, N. J.
120	Maywood Chemical Works	100 W. Hunter Ave., Maywood, N. J.
121	Mepham Corporation, Geo. S.	2001 Lynch Ave., East St. Louis, Ill.
122	Merck & Co., Inc.	Rahway, N. J.
123	Merrimac Chemical Co.	Everett, Mass.
124	Monsanto Chemical Co.	1700 S. 2d St., St. Louis, Mo. (Monsanto (St. Clair County), Ill.).
125	National Aniline & Chemical Co., Inc.	40 Rector St., New York, N. Y. (Buffalo, N. Y.).
126	Naugatuck Chemical Division of United States Rubber Products, Inc.	Naugatuck, Conn.
127	Neville Co., The	Neville Post Office, Pittsburgh, Pa.
128	New York Quinine & Chemical Works, Inc.	99 N. 11th St., Brooklyn, N. Y.
129	Nincet Chemicals Corporation	Pine Ave. and 47th St., Niagara Falls, N. Y.
130	Niagara Smelting Corporation	2710 Graybar Building, New York, N. Y. (Niagara Falls N. Y.).
131	Nixon Nitration Works	Nixon, N. J.
132	Nord & Schulich, Inc.	Foot of Blanchard St., Newark, N. J.
133	Northwestern Blaugas Co.	Hampden Ave. and Charles St., St. Paul, Minn.
134	Northwestern Chemical Co.	Wauwatosa, Wis.

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UNITED STATES TARIFF COMMISSION

POTTERY

HOUSEHOLD TABLE AND KITCHEN ARTICLES OF EARTHENWARE AND OF CHINA, PORCELAIN, AND OTHER VITRIFIED WARES

REPORT No. 102

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POTTERY

HOUSEHOLD TABLE AND KITCHEN ARTICLES OF EARTHENWARE AND OF CHINA, PORCELAIN, AND OTHER VITRIFIED WARES

INTRODUCTION

The Tariff Commission, in accordance with the request of the President, made an investigation and held a hearing with respect to household table and kitchen articles of earthenware and of china, porcelain, and other vitrified wares (hereinafter described as household table and kitchen pottery) under the provisions of section 3 (e) of the National Industrial Recovery Act. The Commission instituted this investigation on May 16, 1934. On the same day it gave notice that a public hearing would be held on June 26, 1934. At this hearing, in Washington, D. C., parties interested were given opportunity to be present, to produce evidence, and to be heard. On April 20, 1935, the Commission made its report to the President.

A summary of the information obtained in this investigation follows:

SUMMARY

1. *Scope of investigation.*—The Tariff Acts of 1913, 1922, and 1930 have distinguished between (a) earthenware and stoneware and (b) china and porcelain. The distinction corresponds to certain technical differences in composition, method of manufacture, and characteristics of the finished product. To a considerable extent, however, articles of the two groups are interchangeable in use and are competitive with one another. Nearly all of the domestic production of household table and kitchen pottery consists of earthenware, whereas the bulk of the imports consists of china and porcelain. During recent years much the greater part of the imports have been of relatively cheap china and porcelain articles. In the case of certain items, particularly cups and saucers, these imports compete keenly with domestic earthenware. The present investigation is concerned chiefly with this competition between domestic earthenware and imports from Japan, almost the sole supplier of imports of the cheaper grades of both earthenware and china and porcelain. The investigation did not cover hotel and restaurant table and kitchen pottery.

2. *Rates of duty.*—Tariff acts have for many years distinguished, with respect both to earthenware and to china and porcelain, between two classes of articles which may be briefly designated as undecorated and decorated. In imports decorated articles constitute about nine-tenths and in domestic production about three-fourths of the total, in point of number, and still larger proportions in value. Under the Tariff Act of 1922 the rate of duty on undecorated household table and kitchen articles of earthenware was 45 percent ad valorem and on the decorated 50 percent. The corresponding rates on china and porcelain articles were 60 and 70 percent, respectively (apart from the special rates on so-called "bone china" included in that act but not in the act of 1930). The Tariff Act of 1930 continued these same ad valorem rates but added to each of them a specific rate of 10 cents per dozen pieces.

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In the case of cheaper articles the specific part of the compound duty represents a very considerable ad valorem equivalent. As the articles imported from Japan are in general of much lower unit value than those imported from other countries, the specific rate is particularly important in imports from Japan. For the year 1934 the average ad valorem equivalents of the compound duties on total imports from Japan of the respective classes of household table and kitchen pottery were as follows:

	Percent
Undecorated earthenware	87.3
Decorated earthenware	75.6
Undecorated china and porcelain	131.1
Decorated china and porcelain (the dominant group)	94.2

These figures are averages based on totals which include some relatively high-priced articles. On the bulk of the imports (as measured by quantity), consisting of lower priced articles, the average ad valorem equivalents of the duties are somewhat higher, and on the cheapest articles, which in general are the most competitive with domestic pottery, they are materially higher.

3. *Source of imports.*—In recent years Japan has in large measure replaced European countries as a source of imports of household table and kitchen pottery. In 1929 Japan, whose proportion was already much higher than some years earlier, supplied 51.6 percent of the total number of pieces imported; in 1934 its share was 85.2 percent. Imports from Japan are, however, of lower unit value than imports from the other countries, partly because of lower average grade and partly (especially since the beginning of 1932 when the Japanese currency was sharply depreciated) because of the lower prices of articles of equal grade. In terms of value, Japan supplied 32.4 percent of the imports in 1929 and 57.7 percent in 1934. The following table shows the shares of each of the leading countries in imports. It will be noted that the United Kingdom has maintained its proportion of value and that the increased proportion of Japan has been at the expense of other European countries.

	Percentage of total number of pieces imported		Percentage of total value of imports	
	1929	1934	1929	1934
All countries	100.0	100.0	100.0	100.0
Japan	51.6	85.2	32.4	57.7
United Kingdom	11.1	7.7	22.3	22.3
Germany	22.2	3.9	26.0	11.4
Other countries (principally France and Czechoslovakia)	15.1	3.2	19.3	8.6

4. *Adoption of the code.*—The domestic producers of household table and kitchen pottery, both of earthenware and of china of the types under consideration in this investigation, operated under the code of the Chinaware and Porcelain Manufacturing Industry. The code went into effect in December 1933. The present investigation therefore deals largely with comparisons between conditions in 1934 after the adoption of the code and conditions in 1933.

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5. *Share of imports in total consumption.*—Notwithstanding the fact that for many years the rates of duty on household table and kitchen pottery (except during the war period when they were somewhat lower but when foreign competition was checked by war conditions) have ranged from 45 percent ad valorem upward, the share of imports in the total consumption in the United States has continued to be much higher than in most other manufactured commodities. The manufacture of such pottery requires a large amount of skilled hand labor, especially for the more highly decorated articles, and the much lower wages of skilled hand labor in the principal pottery-producing countries abroad have enabled foreign producers to continue to compete on a large scale in the American market. The proportion of imports in consumption is highest for the higher priced decorated articles; the greater part of the imports from European countries are of such high-priced articles, and Japan also supplies large quantities, although intermediate and lower priced items constitute the bulk of the imports from that country.

In comparing domestic production with imports, it is necessary to deal with quantities rather than values, particularly in view of the effect of the depreciation of the Japanese yen in lowering the unit values of imports from that country during the last 3 years. The investigation showed that during the 18-month period, January 1933 to June 1934, the sales of decorated household table and kitchen pottery made in the United States totaled about 23,450,000 dozen pieces. Imports of such ware from Japan during this same period totaled about 9,640,000 dozen pieces, and total imports about 11,825,000 dozen. Imports from all countries were thus equal to about 50 percent of the quantity sold by domestic producers, or to about 33⅓ percent of the combined total of such sales and imports (conveniently designated as apparent consumption). With the inclusion of undecorated ware, much less important in quantity and of still smaller importance in value, these ratios become somewhat lower, 43.3 and 30.2 percent, respectively.

The ratio of imports from Japan to apparent consumption of domestic and Japanese articles varies greatly for different kinds of articles. The data for decorated ware are of special significance. For such ware the ratio is lowest for plates sold separately (as distinguished from those included in sets) and highest for special sets other than dinner sets, such as tea and coffee sets where nearly all of the consumption consists of the Japanese product. For the important and highly competitive group of cups and saucers (not parts of sets) the share of imports during the 18-month period mentioned averaged 36 percent. For dinner sets, as a whole, as measured by total number of pieces, the share of imports in apparent consumption during the 18-month period was about 12 percent. The domestic industry, however, specializes in dinner sets consisting of a relatively small number of pieces (services for 6 persons), whereas the bulk of the imports of dinner sets from Japan, in terms of total number of pieces, consists of those having a large number of pieces (services for 12 persons). Consequently the share of imports in consumption is low for the smaller dinner sets and high for the larger; for dinner sets of 93 to 96 pieces, over half of the apparent consumption during the 18-month period was imported, whereas for sets of 32 pieces (a major domestic product) the ratio was less than 2½ percent.

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6. *Relative trends of quantity of domestic production and of imports since 1929.*—It is impossible to determine accurately how the proportion of imports in consumption of household table and kitchen pottery under the Tariff Act of 1930 has compared with the proportion under the act of 1922. The difficulty arises from the fact that under the act of 1922 the duty was exclusively ad valorem, and there was no occasion for the customs authorities to apply any rule with regard to the definition of number of pieces. It is known that what would now be counted as two or more separate pieces (for example, a cup and a saucer treated as a pair, teapots or sugars with covers) was formerly often, and probably usually, reported as one piece. On the basis of estimates of quantity, derived from census figures of total value, and other information, it appears that sales by domestic producers of household table and kitchen pottery (earthenware and china together) in 1929 were about 33,100,000 dozen pieces; in this total each piece is counted separately. Imports from all countries in that year, as reported, were 13,878,000 dozen, equal to about 30 percent of the apparent consumption (about 47,000,000 dozen) based on the total of these two figures; but if the pieces had been counted in the same way in imports as in domestic sales, the ratio would have been materially higher, probably over 35 percent and possibly as high as 40 percent. It would not be significant to compare imports from Japan in 1929 with domestic production, as Japan's share in the total imports was then much smaller than at present. The share of imports from all countries in apparent consumption in 1933 and the first half of 1934 (taken together) was about 30 percent, pieces being counted in the same way for imports as for domestic sales. It seems probable, therefore, that the share of imports in consumption in the last 2 years has been considerably lower than in 1929.

7. *Proportion of imports in apparent consumption before and after adoption of the code.*—More important for the purposes of the present investigation are the figures of the changes in the proportion of imports in consumption between the period preceding and the period following the adoption of the code in the domestic industry. For this purpose imports from Japan are of particular significance. The following statement shows, on the basis of quantity, for each half year of 1933 and 1934 (the code went into effect in December 1933) the share of imports of Japanese household table and kitchen pottery in the combined apparent consumption consisting of sales of domestic pottery plus imports from Japan. The share for the second half of 1934 is approximate only.

Proportion of imports in the combined apparent consumption of domestic pottery and pottery imported from Japan

	January-June 1933	July-December 1933	January-June 1934	July-December 1934
	Percent	*Percent*	*Percent*	*Percent*
Decorated articles	29.8	29.5	28.2	----------
Undecorated articles	12.8	11.7	15.1	----------
All articles	26.4	26.2	25.7	[1] 32

[1] Estimated.

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It will be seen that for decorated and undecorated articles combined the share of imports in apparent consumption fell slightly in the second half of 1933 as compared with the first half, and fell a little further in the first 6 months after the adoption of the code. Decorated articles—which are much more important than undecorated, both in domestic production and in imports, as regards number and still more as regards value—showed substantially the same movement. Sales of undecorated ware by domestic manufacturers, however, were less in the first half of 1934 than in the last half of 1933, whereas the imports from Japan increased materially, so that the share of imports in apparent consumption of this less important group rose sharply.

For the second half of 1934 sales of decorated and undecorated articles combined, by domestic producers (approximate data), were about the same in quantity as for the first half; imports from Japan, on the other hand, were about 34 percent greater than in the first half. Consequently, the share of imports in consumption rose rather sharply, being in the neighborhood of 32 percent for decorated and undecorated articles combined. This increase in imports was largely due to the exceptionally large figures for September, October, and November, apparently explained by anticipation, on the part of importers, of an advance in prices by the pottery exporters' association in Japan; this advance was actually put into effect, as regards certain major articles, on November 1, 1934 (imports arriving in November were mostly shipped before that date). For the 3 months December 1934 and January and February 1935, imports from Japan were only about half as large as in the 3 preceding months, and were 24 percent less than for the same period 1 year earlier.

Percentages showing the share of imports from Japan in the apparent consumption of Japanese and domestic decorated household pottery by half-year periods are presented, for major articles, in the following table; data are not available for the second half of 1934.

Share of imports from Japan in apparent consumption of Japanese and domestic decorated household table and kitchen pottery based on number of pieces

[As an indicator of the relative importance of the several items the total value of sales by domestic producers plus imports (foreign value) during 1933 is shown]

	Quantity (percent)			Value in 1933
	January–June, 1933	July–December, 1933	January–June, 1934	
Dinner sets, total	10.0	9.6	14.7	$5,645,434
Not over 31 pieces	(1)	(1)	(1)	690,364
32 pieces	2.8	1.1	2.9	1,875,956
33 to 52 pieces	1.7	1.7	6.9	689,544
53 to 56 pieces	4.8	4.0	2.8	777,766
57 to 62 pieces	6.9	8.0	19.2	162,032
63 to 66 pieces	22.3	21.0	49.6	132,324
67 to 92 pieces	21.0	6.5	6.9	44,455
93 to 96 pieces	58.4	50.8	47.3	692,778
97 pieces or more	22.9	29.1	36.6	580,215
Cups and saucers, not parts of sets	38.2	40.7	26.1	2,613,601
Plates, not parts of sets	4.1	4.5	7.4	2,591,145
Tea, coffee, and other sets [2]	100.0	100.0	100.0	158,565
Other articles of tableware	32.6	36.3	36.7	3,386,775
Kitchenware	88.3	50.9	36.2	907,490

[1] No data for imports.
[2] The comparatively small sales of domestic tea, coffee, and similar sets are included under "other articles."

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This table shows a sharp decline during the first half of 1934 in the share of Japan in the apparent consumption of cups and saucers not parts of sets, which constitute the most competitive class of pottery, and a still more conspicuous decline in the Japanese share of the trade in kitchenware, the domestic production of which (semivitreous type) increased greatly in 1933 and 1934. On the other hand, the share of imports in the consumption rose considerably in the case of dinner sets, namely from about 10 percent in 1933 to nearly 15 percent in the first half of 1934. A large part of this shift, however, was the result of greatly increased imports of dinner sets of 97 pieces or more, a group in which differences are such between domestic and the Japanese articles that it is generally considered less competitive than most of the other groups. There was in the first half of 1934 a decided increase in the share of imports in the apparent consumption of plates (not parts of sets) but the proportion remained much lower than for most other important classes.

It would appear from these facts regarding the sales of pottery by domestic producers and the imports from Japan that with respect to no important class of household table and kitchen pottery has the ratio of imports to domestic sales, except during a short period in the fall of 1934, when a special causal factor was at work, been higher since than before the adoption of the code in the domestic industry. The explanation of this lies apparently in the increase of the exchange of the yen for the dollar and in the policy of the Japanese producers in advancing the prices, in terms of yen, as more fully set forth in paragraph 10.

8. *Change in wages and hours of labor under the code.*—The code for the pottery industry, which went into effect in December 1933, provided for a maximum of 40 hours of work per week, representing a marked reduction from the previous standard working time of 49½ hours per week (9 hours per day with Saturday half holiday).

The code fixed minimum wages of 40 cents per hour for male employees and 32 cents for females. It also contained a provision that all members of the industry should "endeavor to increase the pay of all employees (already receiving) in excess of the minimum wage . . . by an equitable adjustment of all pay schedules." About the same time that the code went into effect an agreement was made between the employers and the workers' union in the industry, establishing minimum rates of wages higher than those specified in the code, namely 45 cents per hour for men and 35 cents for women. The agreement also provided for an increase of 12½ percent in piece rates and in the rates per hour of timeworkers not affected by these minima; this increase was considered by employers and workers as putting into effect the code provision above quoted. In earthenware factories, which account for nearly all the workers making household table and kitchen pottery, the actual average rate of wages for timeworkers (about half of the total number of wage earners) in the first half of 1934, operating under the code, was 49.8 cents per hour as compared with 40.8 cents in the first half of 1933, an increase of 22 percent. Had the code minimum wages been put into effect with no other changes, the increase would have been 9 percent. The union agreement for increasing the pay of persons above the minimum by 12½ percent actually added about 9 percent to average wages per hour for

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all employees, and the higher minima fixed by the agreement with the union added about 4 percent more.

9. *Employment, earnings, and pay roll as affected by the code.*—The precise effect of the code in the pottery industry on number of wage earners employed, average earnings, and total pay roll cannot be determined from available data. The average number employed in a group of 14 earthenware factories (accounting for the great bulk of the output) making household table and kitchen articles was 54 percent greater in the first 20 weeks of 1934 than in the corresponding weeks of 1933 and the amount of pay roll 77 percent greater. However, the number employed in the latter half of 1933, before the code went into effect, may have been even greater than in 1934 (precise data not available). Average earnings per week (time and piece-workers together) rose from about $16 to about $18.50 between the first 20 weeks of 1933 and 1934, an increase of 15 percent as compared with 22 percent in the average rate per hour for timeworkers.

The total pay roll of 12 earthenware companies (for which data are available) rose from about $2,300,000 in the first half of 1933 to about $3,855,000 in the second half (these two figures partly estimated) and to $3,963,000 during January–June 1934. Most, if not all, of the increase in the second half of 1933 was due to the much greater volume of business.

Because of the complexity of processes and products, pottery producers do not keep costs in such a way as to distinguish labor costs from other costs in the total for any individual finished article. Their records do show the total costs for each such article. The Commission ascertained costs for a number of representative articles in the second half of 1933 and the first half of 1934. These showed a weighted average increase of about 12 percent. (See par. 10.) The general records of expenditures (relating to 12 companies) indicate that the cost for labor per unit increased somewhat more than the aggregate of other costs. Total pay-roll expenditure (absolute amount, not per piece) in the first half of 1934 was about 3 percent greater than in the last half of 1933, while other expenditures, taken together, showed practically no change; that the aggregate expenditures of these companies increased but little was due to a decrease of about 8 percent in the quantity of their output. Of the total value of their product in the first half of 1934, pay roll represented 50.0 percent, as compared with 49.5 percent in the preceding half year.

10. *Changes in domestic costs compared with changes in prices of Japanese pottery.*—From domestic manufacturers the Commission obtained for a number of representative identical articles the total costs of production (not distinguishing the separate factors of costs) in the second half of 1933, all but 3 weeks of which was before the code went into effect, and the first half of 1934. Between the two periods the costs of all the items increased, the range of such increase being from 9 to 16 percent and the average being 12 percent for earthenware and 10 percent for chinaware, this latter of very minor importance in domestic production.

The Commission also obtained the landed costs of representative articles of pottery, principally chinaware, imported from Japan, the landed costs including the price paid in Japan (converted at current rate of exchange), the cost of transportation and delivery to New York, and the amount of duty. These articles were in general not

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closely similar in quality or decoration to the domestic articles for which costs were ascertained, so that direct comparison between costs cannot be made, but comparison of the percentages of change is significant. The various groups of Japanese articles all showed increases for the first half of 1934 over the second half of 1933, these increases ranging from 8 to 18 percent and averaging 10½ percent.

The following table compares the increases in production costs of domestic articles with those in the landed costs of Japanese articles, by groups (nearly all of the domestic sales are of earthenware and the bulk of the imports is of china). Domestic costs were not computed for 53- and 93-piece dinner sets, but changes in the costs of these would necessarily be almost precisely parallel with those in the costs of 32- and 94-piece sets.

	Relative numbers for January–June 1934 based on July–December 1933 as 100			
	Domestic costs of production		Landed costs of imports from Japan	
	China	Earthenware	China	Earthenware
Decorated ware:				
Cups and saucers, not parts of sets	109	112	111.0	107.8
Plates, not parts of sets	109	111	118.0	----------
32-piece sets	110	112	111.6	----------
53-piece sets	----------	----------	111.7	----------
93-piece sets	----------	----------	109.7	----------
94-piece sets	110	113	110.9	----------
Other tableware	----------	----------	108.1	108.2
Weighted average	110	112	110.5	----------
White ware	112	115	----------	----------

This table shows for each of the principal groups roughly the same percentage of increase between the last half of 1933 and the first half of 1934 in the landed costs of Japanese pottery as in the domestic costs of production. The increase in the landed costs of the imported articles between these two periods, however, was in addition to a more marked increase which had already taken place between the first and the second half of 1933, whereas, as indicated by the general operating accounts of producers, unit costs in the United States had fallen somewhat between the first and the second half of that year. The advance in costs of Japanese pottery to importers in the course of 1933 and 1934 was due partly to increase in prices in Japan, in terms of yen, and partly to the rise in the exchange rate of the yen for the dollar. In 1933 a federation of Japanese pottery exporters' associations was organized, which brought about in November 1933, and at various times in 1934, advances in the yen prices of major classes of pottery exported to the United States. The average exchange of the yen rose from 22.4 cents for the first half of 1933 to 28.6 cents for the second half, and to 30.0 cents for the first half of 1934, falling to 29.5 cents for the last half of that year. The effect of these changes in prices and exchange rates on the landed costs of Japanese pottery during the 2 years is summarized in the following table:

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Landed costs of representative articles of decorated pottery imported from Japan relative to January–June 1933 as 100

	July–December 1933	January–June 1934	July–December 1934
Cups and saucers (short line)	121.4	134.5	136.8
Plates (short line)	126.3	149.0	153.0
32-piece sets	134.1	149.6	153.1
53-piece sets	134.1	149.7	153.2
93-piece sets	149.0	163.4	(1)
94-piece sets	148.0	173.0	(1)
Other tableware	124.7	134.9	137.5
Average	131.1	144.8	

[1] No data.

By reason of increases in yen prices, landed costs in the early part of 1935 for some of these articles, particularly short-line cups and saucers, have been higher than during the period July–December 1934.

It appears, therefore, that notwithstanding considerable increase in domestic costs of production since the code went into effect the price competition of imported pottery has not been more severe than before. This is explained by the advance in yen exchange and by the policy of the Japanese pottery producers in advancing yen prices.

11. *General trend of costs, selling prices, and returns to producers.*—The table below summarizes the operating accounts of 12 domestic concerns producing earthenware. Although these concerns cover the great bulk of the "semivitreous branch" of the industry, it is probable that as a group they have shown greater improvement in operating results over the first half of 1933 than this branch of the industry as a whole.

[Data for 1933 approximate only]

	First half of 1933	Second half of 1933	First half of 1934	First half 1934 relative to—	
				First half 1933 as 100	Second half 1933 as 100
Value of sales	$5,266,165	$7,416,352	$7,439,042	141	100
Deduct purchased merchandise	11,369	24,740	6,922		
Add increase in inventory	−200,541	403,059	497,207		
Sales value of production	5,054,255	7,794,671	7,929,327	157	102
Pay roll	[1] 2,300,000	3,855,344	3,962,969	172	103
All other operating, selling, and administrative expenses	2,501,697	3,311,415	3,315,809	133	100
Total expenses	4,801,697	7,166,759	7,278,778	152	101½
Net operating return	252,558	627,912	650,549	258	103½

[1] Estimated; the item below is obtained by subtraction from the reported total of $4,801,697.

The first half of 1933, like 1932, was a period of deep depression in the domestic earthenware industry. During the second half, sales were much larger in quantity and, although there were few if any increases in prices, the proportion of higher priced articles in the output apparently rose somewhat. Production increased considerably more than sales, inventories being built up, whereas in the first half of the year inventories had been reduced. The net operating

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return to the 12 producers of earthenware as a group rose from about $252,000 in the first half of 1933 to about $628,000 in the second half.

In the first half of 1934, as already stated, rates of wages were increased considerably, the cost of materials also rose, and the weighted average cost of production of representative articles was about 12 percent higher than in the second half of 1933. However, the prices received by domestic producers, as shown by the investigation, advanced by substantially the same percentage. Although there was a decline of about 8 percent in quantity of output of the 12 companies, the sales value of output was about 2 percent greater than during the period July-December 1933. As in the preceding period, manufacturers produced considerably more than they sold, adding still further to their inventories. The net return to producers in the first half of 1934 was about $650,000 as compared with about $628,000 in the last half of 1933.

Part of the increase in net return in the second half of 1933, and perhaps all of the further increase in the first half of 1934, were attributable to an increase, of several fold, in the production of kitchenware, on which in general the net return was higher than on tableware.

In the second half of 1934 the sales of these 12 manufacturers were almost exactly the same in value as in the first half. No important changes in prices are known to have occurred, and, although the Commission obtained no cost data, and no general operating accounts, for this period, there is reason to believe that the net return was maintained at approximately the same level as in the first half year. If so, the net return for 1934 as a whole was materially greater than for 1933 as a whole.

12. *Net income of manufacturers of earthenware, 1929–34.*—In addition to the data of operating results by half-year periods above summarized, the Commission obtained general financial statements for a series of years for 12 companies in the earthenware branch, 2 of these being not identical with two of the 12 companies hereinbefore under consideration. These figures showed a ratio of net income (including some income from sources other than pottery manufacture) to net worth (as of the end of the year) as follows: 1929, 11.9 percent; 1930, 7.3 percent; 1931, 7.0 percent; 1932, 2.8 percent; 1933, 6.4 percent. For reasons already set forth, it is probable that the ratio of net income to net worth in 1934 was somewhat higher than in 1933, and presumably approximated, if not exceeded, the figures for 1930 and 1931. If one large company operating under exceptionally favorable conditions be excluded from the group, the net income of the other 11 companies in 1933 was equal to 4.1 percent of their net worth.

13. *Financial position of individual companies.*—The individual concerns in the pottery industry differ widely in size, equipment, efficiency, and the financial results of their operations. Within the last decade or so, important new labor-saving methods have been devised, notably the tunnel kiln and mechanical conveyors. Some domestic companies have introduced these devices successfully. Others have been disinclined or financially unable to do so, and some who have introduced new equipment not properly adapted to the volume and character of their output failed to achieve success.

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The 12 companies producing earthenware covered by the table in paragraph 11 were divided by the Commission into two groups: (*a*) Those of large and medium size, and (*b*) the small producers. For group (*a*) the net operating return in the first half of 1933 averaged 5.7 percent of the value of their product (these percentages are not based on value of assets or net worth); for the second half of the year the return was 9.3 percent, and for the first half of 1934, 9.8 percent. On the other hand, during these same three periods the smaller producers as a group showed net operating returns of 1.3, 1.7, and 0.7 percent, respectively, of the value of their product. Not all of the producers of group (*a*), however, showed more profitable operations than all of the producers of group (*b*).

Of the 12 companies mentioned in paragraph 12, six had a net income for the year 1933 as a whole, ranging from 4½ percent of their net worth to well over 10 percent, 2 practically broke even, and the other 4 had net deficits ranging from about 2½ to more than 10 percent of their net worth. There is no evidence that the particularly unfavorable situation of these last four companies was due to their being more subject to the competition of imports than the other companies.

CONCLUSIONS

The facts above set forth lead to the following conclusions:

(*a*) Imports of household table and kitchen pottery have been substantial throughout recent years, representing in 1933 and 1934 approximately one-third of the domestic consumption, and being equal to about one-half of the domestic production, in terms of quantity.

(*b*) For a period of 3 months in the latter part of 1934 importers brought in exceptionally large quantities of pottery in anticipation of an advance in the prices in Japan, and during that time the ratio of imports to domestic production was decidedly higher than before the code went into effect, but both prior and subsequent to this 3-month period that ratio has been lower than before the code was adopted.

(*c*) Domestic producers have maintained the shorter hours of labor and the higher wages provided by the code, with only a moderate reduction in the volume of their business, and they have been able to increase their prices so that their profits have been at least as large as in the 6 months immediately preceding the adoption of the code and much larger than in 1932 and the first half of 1933.

(*d*) The ability of the domestic producers thus to advance their prices to meet the increase in costs has been due chiefly to the rise in the exchange value of the Japanese yen and to the recent policy of Japanese producers of pottery in raising their prices in terms of yen.

SUPPLEMENTAL INFORMATION ON JAPANESE PRICES

Subsequent to the completion of this report, the Commission received information that some importers were purchasing certain articles at prices lower than the minimum prices fixed by the Federation of Japan Pottery Exporters' Associations for exports to the United States and shown in consular invoices. Facts obtained in a special

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inquiry made by the Tariff Commission establish the correctness of this information. The inquiry disclosed that to date (Dec. 18, 1935) few of the New York importers have actually purchased the Japanese pottery articles at prices below those fixed for export to the United States, and that practically none of these importers is engaged primarily in importation of pottery. In quantity, the most important articles imported at prices below those shown in consular invoices were the cheapest grades of decorated cups and saucers. When so imported, duties were paid on invoice, not on actual purchase, prices.

Information obtained by the Commission also indicates that where the Federation in Japan has been advised that sales were being made at prices below the minimum fixed for export, it has refused to give shipping agents in Japan the necessary permits for subsequent shipments to the United States purchasers involved.

As far as the Commission has information, buying in Japan at less than the established prices for export to the United States did not occur until the latter part of 1934, which was subsequent to the period covered in the Commission's report. Moreover, since that time, it does not appear that this practice has been sufficiently widespread to affect materially the conclusions reached by the Commission.

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HISTORY AND SCOPE OF THE INVESTIGATION

Institution of the investigation

By direction of the President, the United States Tariff Commission on May 16, 1934, instituted an investigation (no. 8) under section 3 (e) of the National Industrial Recovery Act with respect to—

Household (not including hotel):

(*a*) Table and kitchen earthenware and crockeryware composed of a nonvitrified absorbent body;

(*b*) China, porcelain, and other vitrified table and kitchen wares; and

(*c*) Manufactures in chief value of such wares.

A complaint was filed January 12, 1934, with the National Industrial Recovery Administration by the United States Potters Association on behalf of producers operating under the chinaware and porcelain manufacturing industry code. The complaint requested restriction in some manner of imports of competitive pottery, particularly those coming from Japan.

A public hearing, notice of which was also given on May 16, at which all parties interested were given opportunity to be present, to produce evidence, and to be heard, was held in the office of the Commission in Washington on June 26 and 27, 1934.

Types of pottery covered by the investigation

The pottery covered by the complaint, by the order of the President directing the institution of the investigation by the Tariff Commission, and by the investigation instituted in accordance therewith, was specifically restricted to household table and kitchen articles, and accordingly corresponding articles for hotel, restaurant, and similar use were not included within the scope of the investigation. The imports specified in the complaint were furthermore restricted to household table and kitchen articles of earthenware of the kinds provided for in paragraph 211 of the Tariff Act of 1930, and of china and porcelain of the kinds provided for in paragraph 212 of that act.

The only relatively important classes of pottery table and kitchen articles (other than for hotel and restaurant use) not included within the scope of the investigation are: Common yellow, brown, red, or gray earthenware, composed of a body wholly of unwashed and unmixed clay, and not artificially colored; common salt-glazed stoneware; and Rockingham earthenware. All of the foregoing three classes are provided for in paragraph 210 of the Tariff Act of 1930.

Terminology

For tariff purposes pottery is classified under two general categories, namely, (1) earthenware and stoneware, and (2) china and porcelain. Technically, each of these is a different product, but the nomenclature concerning them is not uniform throughout the pottery trade in the United States. The term "pottery" is often used in this country to describe all pottery articles, regardless of their basic character, and sometimes in a more restrictive sense to designate

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pottery other than china and porcelain. Again, the terms "chinaware" and "crockery" are often indiscriminately used when referring to all pottery, and particularly when referring to table and kitchen articles. The terms "china" and "porcelain" (considered by many as synonymous) are, however, used technically, and for the most part by the wholesale trade in general, to differentiate from earthenware and stoneware those pottery products composed of a vitrified or vitreous body which is practically impermeable to liquids, and in the finished state more or less translucent. In most countries such vitrified, translucent pottery would be designated porcelain. It is probable that the term china is used only in English-speaking countries; in the United Kingdom it is used primarily to describe the bone china produced in England; in the United States the term is generally used when referring to English bone china, and with respect to domestic pottery, to designate specifically so-called "Belleek china," and the distinctively American product generally known as "vitreous china." Although the English and domestic china products here mentioned may often be called porcelain, there are technical and physical differences between such china and true porcelain. The methods of firing glazed china and glazed porcelain, particularly tableware, are different, and usually there is a substantial difference in the character of the glaze applied to the bodies of the respective products. The bone china produced in England and the Belleek and so-called "vitreous china tableware" (except possibly one-fire ware) produced in the United States are made by the "earthenware" process; that is, the body is first fired at a relatively high temperature which vitrifies it, thereby making it practically impermeable, is then covered with the prepared glaze (usually plumbiferous), and finally subjected to a second fire of considerably lower temperature which vitrifies the glaze and fuses it on the body.

On the other hand, true porcelain is produced by first firing the body at a very low temperature (the resultant product is essentially porous), then covering it with the prepared glaze (usually calcareous or feldspathic), and subsequently subjecting it to an extremely high temperature which vitrifies the body and glaze, and practically fuses them together.

An earthenware body, as distinguished from china or porcelain bodies, is not vitrified, or in some instances may show incipient vitrification. The body is "matured" in the first firing at a relatively high temperature (the resultant product is more or less porous, and permeable), is then covered with the prepared glaze (usually plumbiferous), and subsequently subjected to a second firing at a considerably lower temperature which matures the glaze and fuses it to the body. In either fire the temperature is not high enough to practically fuse together (as in the case of china or porcelain) the materials of which the body is composed, or (as in the case of true porcelain) the body and the glaze with which it is covered. Earthenware is, therefore, regardless of quality, characteristically more or less porous and absorbent, and except in unusually thin sections, opaque. The glaze renders it impermeable to liquids and other substances. Unlike true porcelain and the better grades of china, it is susceptible to crazing and to discoloration by grease or other substances where the body has become exposed through cracking or chipping off of the glaze.

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The term "earthenware" is often used in this country, in the United Kingdom, and possibly in other countries to designate nonvitrified pottery products. Among other terms used in the more important pottery producing countries are: Faience, majolica, white granite, semiporcelain, ironstone china, silicon china, semivitreous china, queensware, cream-colored ware, and flint ware. Most of these terms are generally used to distinguish some specific type of earthenware.

The importance and need of a uniform terminology with respect to the various types or classes of pottery sold in the American markets have been emphasized by the difficulties encountered by domestic producers when it was necessary to so describe earthenware products that those produced by manufacturers operating under the Earthenware Manufacturing Industry Code could be distinguished from those produced by manufacturers operating under the Chinaware and Porcelain Manufacturing Industry Code.

The usual commercial articles of earthenware for household table and kitchen use produced in this country may be divided into two general classes or groups: (1) those having a carefully prepared and uniform body composed of several different materials, produced under the Chinaware and Porcelain Manufacturing Industry Code, and (2) those composed of a body of clay unmixed with other materials, produced under the Earthenware Manufacturing Industry Code. The products coming within each of these two classifications are, basically, earthenware, but technically and physically they are appreciably different, and there are substantial differences in their costs of production, articles in the first group having as a whole a higher cost than corresponding articles in the second group.

The Chinaware and Porcelain Manufacturing Industry Code covers two distinct branches of the pottery tableware industry. They are (1) the Vitrified China Branch, which produces a comparatively small amount of vitreous china dinnerware but whose major product is vitreous china hotel and restaurant ware, and (2) the so-called "white ware" branch, designated the "Semi-Vitrified China Branch" in the code, as amended, whose production is almost wholly earthenware household table and kitchen articles.

No difficulty arises with respect to identification and proper classification of the type of ware produced by manufacturers operating under the vitrified china branch of the industry.

In order, however, to distinguish their earthenware products from those produced by the earthenware manufacturing industry, it was necessary for producers in the white ware branch to fix upon a specific term for the type they produced. The terminology used by that branch of the industry for this purpose is contained in subsection (2), approved December 3, 1934, amending article II, section (a), of the Chinaware and Porcelain Manufacturing Industry Code, which reads in part as follows:

(2) The term "Semi-Vitrified China Branch" of the industry as used herein is defined to mean the manufacturers of all properly glazed semi-vitreous or semi-vitrified china, tableware, kitchenware, dinnerware, and kindred lines, * * *; earthenware, stoneware, or clay flower pots, however, being hereby specifically excluded.

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For the purposes of the administration of that code, therefore, the term "earthenware" has been discarded, and the terms "semivitreous" or "semivitrified" china have been adopted. For the sake of brevity or to avoid awkward repetition, the term "earthenware" will often be used in this report as equivalent to the terms "semivitreous china" and "semivitrified china." In addition, except where specifically differentiated, the words "china" and "porcelain" will be treated as synonymous terms to distinguish vitrified translucent pottery from earthenware and stoneware.

The term "stoneware" is generally used to designate a type of pottery having a vitrified, impermeable, body. The characteristic opacity of the body distinguishes it from china and porcelain, and its impermeability distinguishes it from earthenware.

A classification in summary form of the principal types of household table and kitchen articles of pottery sold in the United States is given in the following table.

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Principal types of pottery household table and kitchen articles [1]

Tariff paragraph	Body materials	Firing and glaze	Body characteristics	Tariff terminology	Code terminology	Common names
210	Natural clay, unwashed and unmixed.	1 fire, or high first fire; usually lead glaze.	Nonvitrified, absorbent, opaque.	Common earthenware.	Earthenware (earthenware manufacturing industry).	Earthenware.
	Various	1 fire, salt glaze	Vitrified, impermeable, opaque.	Common salt glazed stoneware.	Stoneware (subclassification under earthenware manufacturing industry).	Stoneware.
211	Clays mixed with other materials.	High first fire, low second fire (occasionally only 1 fire); usually lead glaze.	Nonvitrified, absorbent, opaque.	Earthenware, including white granite, semiporcelain, cream-colored ware.	Semivitrified or semivitreous china (branch of chinaware and porcelain manufacturing industry).	Earthenware, china, chinaware, semiporcelain, white granite, and white ware.
		1 fire, or high first fire; usually salt glaze or lead glaze.	Vitrified, impermeable, opaque.	Stoneware	Stoneware (subclassification under earthenware manufacturing industry).	Stoneware.
212	Clays mixed with other materials.	High first fire, low second fire; lead glaze.	Vitrified, impermeable, more or less translucent.	China	Vitrified or vitreous china (branch of chinaware and porcelain manufacturing industry).	China, porcelain.
		Low first fire, high second fire; usually calcareous or feldspathic glaze.	do	Porcelain	[2]	Porcelain, china.

[1] Crockery is a term often used to designate all pottery, and more specifically kitchen articles.
[2] Little, if any, produced in the United States.

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Domestic field work

Field work in the investigation was begun the last of May 1934, and early in June several crews from the Commission's staff were engaged in obtaining data from a number of domestic plants. Preliminary to work at the plants, a conference was held on June 5 at East Liverpool, Ohio, with representatives of the domestic industry and of the pottery workers. Among the matters discussed at this conference were the character and scope of, and tentative plans for conducting the investigation, and a committee of producers and members of the Commission's staff was appointed to select companies representative of the industry as a whole from whose records data were to be obtained. The committee selected 12 out of 27 or more companies producing (in 1934) earthenware household table and kitchen articles of the type designated in the code as semivitrified or semivitreous; one company producing mainly china specialties and kitchen articles; and the two companies producing so-called "vitreous" china dinnerware. The committee, in making its selection of the companies producing earthenware, first divided all producers in that branch of the industry into three general groups: (1) the larger companies using tunnel kilns for firing the ware, (2) smaller companies mainly using tunnel kilns, and (3) companies using only the older type (intermittent) kilns. It was agreed by the members of the committee, and later by the producers attending the conference, that the transactions of the companies selected from each of these three groups were, in the aggregate, representative of those of the industry. It was also agreed at that time that other companies might be selected, if in the course of the investigation the Commission found it desirable and necessary. Two companies were later added, making a total of 14 companies producing earthenware, 1 china specialties, and 2 china dinnerware, from whose records data were taken.

Records were not kept by any of the several companies showing in summary form the quantity of ware produced or sold in any given period. For the purposes of the investigation it was essential that the approximate quantity produced or sold by the industries under consideration should be determined. The Commission, accordingly, made an extensive analysis of the sales of the selected companies in 1929, 1932, 1933, and in the first 6 months of 1934. The data obtained in this analysis, together with figures of value of total sales reported by several companies in response to a questionnaire, were used as a basis for computing the total number of pieces of earthenware and china household table and kitchen articles sold by the domestic industry in each of the aforementioned periods. The analysis also made it possible to determine approximately the different articles and groups of articles representing in quantity and in value the bulk of sales, and the ratio of the sales of each of these articles and groups to total sales.

Data in detail were obtained from records of the respective companies concerning their costs of production of specific articles for periods immediately preceding and subsequent to the adoption of the code, to determine the trend of domestic costs of production for comparison with the trend of costs to importers for selected articles imported from Japan in important amounts in the corresponding periods.

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Studies were also made at the domestic plants of wages and pay rolls, financial and operating statements, price trends, equipment, and other matters affecting production and sales.

Field work concerning imports

In comparatively recent years annual imports from Japan of household table and kitchen articles of pottery greatly exceeded those from any other one country, Japan having displaced Germany with respect to quantity and value of china articles, and the United Kingdom with respect to quantity of earthenware articles, as the principal source of supply of United States imports of such pottery as a whole.

Field work concerning imports was begun at the same time that work was started at domestic plants. Records of importers were analyzed to determine the relative importance in quantity and in value of the various articles and groups of articles imported during the same periods covered by the analyses of sales of domestic products. Studies were also made of the trend of prices and of costs to importers of the foreign articles, and of other competitive factors. Data were obtained from practically all concerns in New York City, and from several at other points, importing a relatively large amount of pottery household table and kitchen articles produced in Japan. Figures for Japanese articles included imports of several of the larger retail chain store organizations and of a number of importing wholesalers, including some of the largest in the country. The imports by these companies in the aggregate are considered representative of all imports of earthenware and china household table and kitchen articles from Japan in specified periods.

Some figures were also obtained from a few concerns in New York indicating the trend of their imports of tableware produced in England, Germany, France, Czechoslovakia, the Netherlands, and Belgium.

The tabulation in detail of the imports in several years for a large number of concerns required considerable time and a vast amount of labor. This tabulation was greatly expedited by the full cooperation of the importers who performed a large part of the work of transcribing and summarizing the required data. Figures for a few importers were obtained direct from their records by representatives of the Commission, who also checked against the original documents the data prepared by importers.

TARIFF HISTORY

Imports of household table and kitchen articles have always represented a large proportion of the consumption of such articles in the American markets. In practically all tariff acts the rates of duty for the important classes of pottery tableware have been relatively high.

The lowest rates under the last four tariff acts for pottery household tableware of the kinds under consideration in this summary were those provided for earthenware and stoneware in the act of 1913, namely, 35 percent ad valorem and 40 percent ad valorem, respectively, for undecorated and decorated articles; the rates under the act of 1909 were 55 percent and 60 percent. Because of conditions prevailing during the war period, when imports were largely curtailed and there was a large demand for domestic pottery, the effect of the compara-

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tively low rates upon the domestic industry could not be adequately measured. The rates under the act of 1913 (50 percent or 55 percent) for china and porcelain were not materially lower than those provided for such ware under the act of 1909 (55 percent or 60 percent). Subsequent to the war, however, the importation of pottery tableware, particularly china articles, from Germany was resumed on a relatively large scale. These imports of china could be landed at a relatively low cost to the importer because duties were paid on such imports on the basis of the wholesale values in Germany for like or similar articles sold for consumption in that country, which in terms of American currency were much lower than the values for export to the United States. The values for duty purposes computed on this basis were as low as 30 percent or less of the invoice prices in American currency actually paid for the ware by the importers.

This condition prevailed until the enactment of the Emergency Tariff Act of 1921, which provided that for merchandise subject to an ad valorem rate of duty or to a duty based upon or regulated in any manner by the value thereof, duty should not be assessed on a value less than the export value (as defined) of such merchandise.

The Tariff Act of 1913, although the rates were lower than theretofore, was the first to provide separate rates of duty for earthenware and stoneware, on the one hand, and for china and porcelain on the other hand. This change in tariff policy was made in response to the request of the United States Potters Association on behalf of domestic producers, who at that time complained particularly of competition arising through the large imports of relatively inexpensive china and porcelain tableware from Germany. Under this act the rates for china and porcelain were considerably higher than for earthenware and stoneware.

The Tariff Act of 1922 was the only one to provide separate rates for different types of china and porcelain. That containing 25 percent or more of calcined bone (generally known as bone china) was provided for at rates substantially lower than those provided for all other types.

The Tariff Act of 1930 provides compound rates of duty for pottery table and kitchen articles. In addition to the several ad valorem rates, there is a specific rate of 10 cents per dozen pieces for such articles. For some articles, these compound rates represent much higher average ad valorem rates of duty than were provided for the same kinds of articles in any of the four preceding tariff acts. Data regarding average ad valorem equivalents on imports from different countries, and of different kinds of articles imported from Japan, are presented in a subsequent section.

The rates of duty provided under the Tariff Acts of 1909, 1913, 1922, and 1930, for household table and kitchen articles of the kinds included within the scope of this investigation follow.

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Household table and kitchen articles of pottery: Rates of duty under the Tariff Acts of 1909, 1913, 1922, and 1930

Act of—	Paragraph no.	Commodity	Rate of duty
1909		Earthenware, stoneware, china and porcelain:	
	93	Decorated, colored, etc	60 percent ad valorem.
	94	Not decorated, colored, etc	55 percent ad valorem.
1913	79	Earthenware and stoneware:	
		Decorated, colored, etc	40 percent ad valorem.
		Not decorated, colored, etc	35 percent ad valorem.
	80	China and porcelain:	
		Decorated, colored, etc	55 percent ad valorem.
		Not decorated, colored, etc	50 percent ad valorem.
1922	211	Earthenware and stoneware:	
		Decorated, colored, etc	50 percent ad valorem.
		Not decorated, colored, etc	45 percent ad valorem.
	212	China and porcelain:	
		Decorated, colored, etc	70 percent ad valorem.
		Not decorated, colored, etc	60 percent ad valorem.
		Containing 25 percent or more of calcined bone:	
		Decorated, colored, etc	55 percent ad valorem.
		Not decorated, colored, etc	50 percent ad valorem.
1930	211	Earthenware and stoneware:	
		Decorated, colored, etc	50 percent ad valorem and 10 cents per dozen pieces.
		Not decorated, colored, etc	45 percent ad valorem and 10 cents per dozen pieces.
	212	China and porcelain:	
		Decorated, colored, etc	70 percent ad valorem and 10 cents per dozen separate pieces.
		Not decorated, colored, etc	60 percent ad valorem and 10 cents per dozen separate pieces.

Ad valorem equivalent of the duties on imports from different countries

Table 1 shows computed ad valorem rates of duty on imports for consumption in 1929, 1933, and 1934, of earthenware, stoneware, china, and porcelain household table and kitchen articles, from principal sources. Table 2 shows the rates for the four classes separately.

TABLE 1.—*Earthenware, stoneware, china, and porcelain household table and kitchen articles, not decorated, and decorated: Computed ad valorem rates of duty on imports for consumption from principal sources, 1929, 1933, and 1934*

Country	1929	1933	1934
	Percent	*Percent*	*Percent*
Japan	65.7	100.4	88.5
Germany	64.0	73.0	72.5
United Kingdom	51.1	60.9	58.9
France	66.3	67.9	64.1
Czechoslovakia	63.9	76.0	73.8

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TABLE 2.—*Earthenware, stoneware, china, and porcelain household table and kitchen articles, not decorated, and decorated: Actual or computed ad valorem rates of duty on imports for consumption, from principal sources, 1929, 1933, and 1934*

Item	1929	1933	1934
Earthenware and stoneware:			
Not decorated:	*Percent*	*Percent*	*Percent*
Japan	45.0	121.9	87.3
Germany	45.0	61.9	56.8
United Kingdom	45.0	54.1	52.3
France	45.0	52.3	49.8
Czechoslovakia	45.0	72.8	53.4
Decorated:			
Japan	50.0	82.4	75.6
Germany	50.0	57.5	57.3
United Kingdom	50.0	59.4	56.9
France	50.0	55.0	51.4
Czechoslovakia	50.0	63.4	57.7
Not decorated, and decorated:			
Japan	49.9	84.2	76.4
Germany	49.6	58.5	57.1
United Kingdom	49.8	59.0	56.7
France	49.8	54.6	53.7
Czechoslovakia	49.8	63.7	57.0
China and porcelain:			
Not decorated:			
Japan	60.0	160.4	131.1
Germany	60.0	68.7	67.1
United Kingdom	50.0	61.6	61.8
France	60.0	65.2	64.5
Czechoslovakia	60.0	73.7	65.9
Decorated:			
Japan	70.0	107.1	94.2
Germany	70.0	76.7	75.5
United Kingdom	55.0	71.4	71.2
France	70.0	73.4	73.0
Czechoslovakia	70.0	77.7	76.9
Not decorated, and decorated:			
Japan	69.7	108.8	95.1
Germany	69.5	76.3	75.0
United Kingdom	54.9	71.2	71.0
France	69.8	73.1	72.1
Czechoslovakia	69.8	77.7	76.3

The specific rate of 10 cents per dozen pieces represents a negligible proportion of the total amount of duty per unit for relatively expensive articles. For inexpensive articles the amount of the specific duty may equal or exceed the amount of the ad valorem duty per unit; this was particularly true with respect to imports from Japan during the period of unusually low prices in that country (1932 and the early months of 1933) before values per unit in Japanese yen began to increase, and when the value of the yen, in terms of United States currency, was only about 20 cents. Table 3 shows the value at plant, the computed amount of duty, and the computed ad valorem rate of duty, for a number of different household table and kitchen articles of earthenware and of china imported from Japan in 1934. This will indicate to some extent the wide spread in the effective rates of duty for imports of such articles from that country in that year.

During the period of exceptionally low unit values in Japan the ad valorem equivalent rate of duty for inexpensive articles was much greater than in 1934. For example, for decorated china cups and saucers of inferior quality having a value at Japanese plant in 1934 of about 32 cents per dozen cups and dozen saucers, the ad valorem equivalent was about 133 percent; for similar cups and saucers having a value in the early part of 1933 of around 12 cents per dozen, the ad valorem equivalent was about 237 percent; and for decorated earthenware cups and saucers valued at about 12 cents per dozen, it was about 217 percent.

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TABLE 3.—*Computed ad valorem rates of duty on imports of specific earthenware and china household table and kitchen articles from Japan, 1934*

Article	Value at plant, including packing [1]	Specific duty [2]	Ad valorem duty		Total duty	Computed ad valorem rate of duty
		Amount	Rate	Amount		
Earthenware:						
Cups and saucers, not decorated, sold in pairs, dozen	$0.255	$0.200	*Percent* 45	$0.115	$0.315	*Percent* 123.5
Cups and saucers, decorated, sold in pairs, dozen	.318	.200	50	.159	.359	112.9
Plates (small), decorated, do	.144	.100	50	.072	.172	119.4
Teapots, decorated, do	.352	.200	50	.176	.376	106.8
Sugars and creamers, decorated, do	.628	.300	50	.314	.614	97.8
Waffle sets (5 pieces) decorated, dozen sets	2.040	.500	50	1.020	1.520	74.5
53-piece dinner sets, decorated, set	1.953	.441	50	.977	1.418	72.6
China:						
Cups and saucers, decorated, sold in pairs, dozen	.318	.200	70	.223	.423	133.0
Do, do	.393	.200	70	.275	.475	120.9
Do, do	.501	.200	70	.351	.551	110.0
Do, do	.780	.200	70	.546	.746	95.6
Do, do	1.130	.200	70	.790	.990	87.6
Do, do	2.000	.200	70	1.400	1.600	80.0
Plates, decorated, do	.460	.100	70	.322	.422	91.7
Do, do	1.517	.100	70	1.062	1.162	76.6
Do, do	2.489	.100	70	1.742	1.842	74.0
Teapots, decorated, do	.546	.200	70	.382	.582	106.6
Do, do	.754	.200	70	.528	.728	96.6
Tea sets (23 pieces) decorated, set	.270	.190	70	.189	.379	140.4
Do, do	.480	.190	70	.336	.526	109.6
Do, do	3.410	.190	70	2.387	2.577	75.6
Sugars and creamers, decorated, dozen pairs	.790	.300	70	.553	.853	108.0
Dinner sets, decorated:						
32 pieces, set	2.370	.267	70	1.659	1.926	81.3
53 pieces, do	9.860	.441	70	6.902	7.343	74.5
94 pieces, do	7.975	.783	70	5.583	6.366	79.8
94 pieces, do	13.410	.783	70	9.387	10.170	75.8

[1] Values in Japanese yen converted into United States currency at rate of 30 cents per yen.
[2] Rate: 10 cents per dozen pieces, each piece in a combination (such as a cup and a saucer sold as a pair, or a teapot with cover) counting separately.

HISTORY OF THE DOMESTIC INDUSTRY

The earthenware (semivitreous type) tableware industry

The domestic earthenware tableware industry has been long established. In the early part of the nineteenth century a number of English potters migrated to America and erected potteries in Trenton, N. J., which for many years was the principal center of the domestic earthenware tableware industry. In later years the industry moved rather rapidly to other centers farther west, and in the past 5 or more years production of this class of tableware in Trenton has practically ceased.

After many years of struggle and adversity, the industry as a whole developed a product that in quality compared favorably with the earthenware tableware imported in large amount from England, a ware having an established reputation for excellence of quality and which for a long period predominated in the sales of this specific class of pottery tableware in the American markets, and is still an important factor in competition. The "white ware" branch of the earthenware tableware industry is by far the largest in the domestic pottery household tableware industry in point of quantity and value of production. This branch, which includes all companies whose sole or major product is the so-called "semivitrified" type of earthenware household table and kitchen articles, has for many years been

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largely centered in the East Liverpool, Ohio, district, which includes potteries nearby in West Virginia. Sebring, Ohio, is also one of the more important producing points. For a long period production in Ohio exceeded that in any other State. Within the past 10 or more years, however, a number of large plants were constructed on the West Virginia side of the Ohio River, near East Liverpool, mainly by companies formerly operating in that city, and in 1932 the value of production (as reported by the census) of this class of pottery in West Virginia for the first time exceeded that for Ohio. In 1933 and 1934, this type of household tableware was also produced in Pennsylvania, Maryland, Virginia, Tennessee, Michigan, Indiana, and Illinois, and possibly in New Jersey, Colorado, and California.

In 1923, according to a list of the active members of the United States Potters Association (representing practically all producers in the industry in that year) submitted by the secretary of that association, there were about 47 concerns with plants having a total of about 548 intermittent kilns (biscuit and glost), engaged primarily in the production of earthenware household table and kitchen articles of the semivitrified type. The succeeding 10 years witnessed many important changes in the industry. At different times throughout this period about 28 of these companies discontinued operations, and in some instances their plants were demolished. Two of them subsequently reorganized and resumed operations; the plant of one company and the two plants of another company were taken over by three new concerns for the production of this type of tableware; and the plants of six companies were used for producing other types of pottery. Only a few new companies entered the field in this period; some of these purchased old plants in which in some cases they made more or less extensive alterations in buildings and equipment. A number of the long-established companies, including several of the larger ones, erected new plants, and discontinued operations in their old plants wholly or in part. There were several consolidations during this period. The most outstanding of these was the formation of the American Chinaware Corporation, organized in 1929, which included eight companies producing earthenware (all in Ohio), having a total of 102 intermittent kilns (biscuit and glost). This corporation filed a voluntary petition in bankruptcy in October 1931, and operations were discontinued at the plants of the constituent companies. Operations were subsequently resumed at the plants of three companies (included in those previously referred to) having 27 kilns.

In comparatively recent years the tendency in the domestic semivitrified earthenware tableware industry has been toward the construction of new large plants, and to a noticeable extent the reconstruction and considerable enlargement of a few old plants. Subsequent to 1923 new construction on a relatively large scale included for the most part installation of a new type of kiln, the so-called "tunnel kiln."

The tunnel kiln of the type first installed consists of a firing chamber usually 300 feet or more in length. The ware to be fired—for both biscuit and glost—is placed in saggars on cars which are automatically moved through the kiln at a fixed rate of speed. The movement of the cars is continuous, and firing the ware by this method is not economical unless the full capacity of the kiln is utilized continuously; if so utilized, the tunnel kiln, as compared with the older type (inter-

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mittent) kiln, is much more economical with respect to total fuel cost per unit of product, and a smaller number of employees is required for the former than for the latter type of kiln per unit of product.

Information obtained by the Commission indicates that subsequent to 1923, approximately 46 tunnel kilns for biscuit and glost firing have been installed by 18 companies in their semivitrified earthenware tableware plants; and most, if not all, of these concerns have also installed tunnel decorating kilns, which have as a whole substantially increased the capacity of the respective plants with respect to decorated ware. Of these 46 kilns, 32 were installed by 13 companies operating in 1923, and 14 by 5 companies who began operations subsequent to that year. New plants, or additions to the buildings at old plants, accounted for about 20 of these kilns, and the remaining kilns were installed in old plants. At the latter a number of the intermittent kilns were demolished to make room for the tunnel kilns.

Figures giving a comparison of the biscuit and glost kiln capacity for the industry in 1923 with that for 1934 and the early part of 1935 can only be approximated; for this purpose it is necessary to estimate the capacity of the tunnel kilns in terms of intermittent kilns. In 1923 there were about 47 companies operating plants having a total capacity of about 548 kilns of the intermittent type. In 1934 about 28 companies operating in that year had a total biscuit and glost capacity estimated at about 576 kilns. These figures show that the present capacity of the plants operated by a relatively small number of producers is somewhat greater than that of plants operated in 1923 by a considerably larger number of producers. A number of the plants that ceased operating were in old buildings, and relatively few changes in the way of more modern equipment had been made in an effort to make them more efficient and more economical to operate, although the industry was at the time going through a fairly prosperous period; some of these were subsequently razed. Seven or more plants idle at the present time are, however, in comparatively new buildings; the kilns (intermittent type) and other equipment as a whole are in most instances in usable condition.

The annual sales of one company have for many years greatly exceeded those for any other company. Operating 3 plants with 32 kilns in East Liverpool, Ohio, this company in 1905 constructed a new plant on the West Virginia side of the Ohio River near that point, which practically doubled their kiln capacity; and in 1914 built an additional plant with 16 kilns, which increased their total biscuit and glost firing equipment to 78 kilns of the intermittent type. In 1923 they constructed at the same point in West Virginia a large tunnel-kiln plant which began producing the latter part of 1924. In succeeding years the company constructed 2 additional large tunnel-kiln plants, and later demolished the intermittent kilns in the 2 plants first built in West Virginia and installed tunnel kilns. For a considerable period operations were discontinued in the three plants in East Liverpool, which finally were demolished. From a total in 1902 of 32 intermittent biscuit and glost kilns (in 3 plants in East Liverpool), and in 1923 of 78 intermittent kilns, the present (1935) capacity of this company, owning 5 plants in West Virginia equipped wholly with tunnel kilns, is estimated at the equivalent of about 108 intermittent biscuit and glost kilns, as compared with the next largest company having an estimated capacity of between 50 and 55 kilns in terms of intermittent kilns.

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Several companies have installed somewhat extensive conveyor systems which greatly expedite the handling of raw materials and the ware at different stages of manufacture, and a large proportion has from time to time installed other new and more modern equipment in various departments of their plants. For the most part the buildings and equipment of the plants operating in 1934 and 1935 are efficient and in a state of good repair, and most of the plants are efficiently and economically operated.

Table 4 shows for a series of years the value of domestic production of earthenware table and kitchen articles (semivitrified type) by the so-called "white ware" branch of the industry, as reported by the Bureau of the Census. Statistics of quantity of such ware produced are not reported by that Bureau.

During the period 1901–15, annual production did not vary greatly, ranging between about $11,500,000 and $15,000,000. During the war, when imports of pottery as a whole were largely curtailed, sales of domestic products increased rapidly and were subsequently maintained at a high level up to the period of the general business depression beginning about the latter part of 1929. Production reached a peak of about $38,700,000 in 1923; in the period 1926–29, it ranged from about $31,500,000 to about $33,500,000. In 1932, however, it had declined to about $14,000,000 (the lowest point since 1909), and in 1933 was about $15,000,000 (the latest annual figures available).

The appreciable curtailment of production in 1921 and 1922 may be largely accounted for by the general business depression during the former year, and by a strike affecting a portion of the industry which endured throughout practically the last 3 months of 1922.

TABLE 4.—*Earthenware table and kitchen articles (semivitrified type): Value of production in the "white ware" branch of the domestic pottery industry, 1901–33*

Year	Value	Year	Value	Year	Value
1901	$11,608,898	1912	$14,829,431	1923	$38,695,807
1902	12,371,111	1913	15,066,811	1924	36,277,578
1903	12,493,012	1914	14,968,079	1925	32,815,622
1904	11,924,404	1915	15,324,242	1926	33,563,570
1905	12,809,414	1916	18,191,390	1927	31,692,083
1906	14,152,503	1917	20,920,469	1928	31,434,506
1907	13,913,680	1918	25,305,926	1929	32,066,498
1908	11,474,147	1919	29,847,261	1930	24,194,055
1909	13,728,316	1920	38,323,880	1931	20,108,359
1910	14,780,980	1921	29,744,343	1932	14,324,712
1911	14,366,251	1922	28,080,721	1933	15,005,178

Source: Bureau of the Census.

The tendency in recent years toward a greater concentration of the industry at certain points and the discontinuance of operations at a number of somewhat widely dispersed plants have caused considerable distress to the pottery workers at points where the pottery plant has been the only important source of employment for industrial workers. At Sebring, Ohio, one of the largest producing points, several plants have ceased operating, and for a long period a large proportion of the pottery workers have been unable to find employment in the industry at that or any other place.

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The china household tableware industry

The amount of china tableware and kitchen articles for household use produced in the United States is relatively small. The most important type in point of total value is the very high-grade and comparatively expensive product generally known as "American Belleek china." At the present time (1935) practically the entire production of this class of pottery is by one company in Trenton, N. J. In comparatively recent years two or three other companies (in Ohio) were producing a somewhat similar ware; the latest available information indicates that none of these is now operating.

A considerably less expensive type of vitreous china dinnerware for household use is made in negligible amounts by two companies producing a relatively large amount of vitreous china tableware for hotel and restaurant use. One of these companies is in Wheeling, W. Va., and one in Syracuse, N. Y. Practically the only other production in this country of china table and kitchen articles for household use is by a company whose major product is china specialties and other articles not used on the table or in the kitchen in private homes.

IMPORTS

General summary

Table 5 summarizes the combined imports of undecorated and decorated household table and kitchen pottery, as reported in Department of Commerce statistics, and table 5a distinguishes the four major groups. Tables giving more complete data separately for earthenware and stoneware, and for china and porcelain, not decorated and decorated, are given in the appendix.

TABLE 5.—*Earthenware, stoneware, china, and porcelain household table and kitchen articles: Summary of imports for consumption, 1928–34*

Calendar year	Rate of duty	Quantity [1]	Value	Unit value [1]	Computed duty	Computed ad valorem rate
		Dozens				*Percent*
1928	Various	13,569,491	$13,313,656	$0.98	$8,218,115	61.7
1929	do	13,878,263	13,847,837	1.00	8,472,560	61.2
1930:						
Jan. 1–June 17	do	6,287,902	6,307,496	1.00	3,854,027	61.1
June 18–Dec. 31	do	4,069,423	4,315,214	1.06	3,076,934	71.3
		10,357,325	10,622,710	1.03	6,930,961	65.2
1931	do	7,123,047	5,523,042	.78	4,110,526	74.4
1932	do	6,763,627	3,248,587	.48	2,676,823	82.4
1933	do	8,792,975	4,053,565	.46	3,345,813	82.5
1934	do	9,640,451	5,516,163	.57	4,311,019	78.2

[1] Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in method of counting number of pieces. For this reason also the average unit values for the 2 periods are not comparable.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

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TABLE 5 a.—*Household table and kitchen articles: Imports for consumption, distinguishing earthenware and china, and articles decorated and not decorated, 1928–34*

	Quantity (dozen pieces) [1]			Value		
	Total	Decorated	Not decorated	Total	Decorated	Not decorated
Earthenware and stoneware:						
1928	4,549,629	3,971,108	578,521	$4,682,106	$4,346,777	$335,329
1929	5,122,947	4,644,790	478,157	5,271,048	4,987,020	284,028
1930	4,008,104	3,815,230	192,874	4,132,548	4,006,823	125,725
Jan. 1–June 17	2,364,442	2,224,637	139,805	2,432,357	2,349,199	83,158
June 18–Dec. 31	1,643,662	1,590,593	53,069	1,700,191	1,657,624	42,567
1931	2,436,058	2,291,262	144,796	2,259,456	2,183,429	76,027
1932	2,321,178	2,123,039	198,139	1,320,138	1,261,624	58,514
1933	3,265,777	2,915,613	350,164	1,784,512	1,655,543	128,969
1934	3,942,268	3,518,614	423,654	2,479,164	2,314,063	165,101
China and porcelain:						
1928	9,019,862	8,477,199	542,663	8,631,550	8,304,839	326,711
1929	8,755,316	8,208,636	546,680	8,576,789	8,278,951	297,838
1930	6,349,221	5,970,230	378,991	6,490,162	6,265,665	224,497
Jan. 1–June 17	3,923,460	3,683,337	240,123	3,875,139	3,735,556	139,583
June 18–Dec. 31	2,425,761	2,286,893	138,868	2,615,023	2,530,109	84,914
1931	4,686,989	4,385,208	301,781	3,263,586	3,141,426	122,160
1932	4,442,449	4,121,499	320,950	1,928,449	1,862,485	65,964
1933	5,527,198	5,104,979	422,219	2,269,053	2,192,765	76,288
1934	5,698,183	5,303,461	394,722	3,036,999	2,934,476	102,523

[1] Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in method of counting number of pieces.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

Information obtained by the Commission from a number of importers—mainly those importing Japanese pottery—indicates that the figures of quantity, as reported in official statistics, for imports under the act of 1922 are not comparable with those under the act of 1930. Under the former act, the amount of duty on a given article did not depend at all upon the number of pieces as under the latter act. According to these importers, the method of computing the number of pieces (reported for statistical purposes only) under the act of 1922 differed substantially from that for duty purposes under the act of 1930. It is claimed that prior to June 1930 a cup and its saucer, for example, were reported as one piece, whereas they would now be counted, for statistical as well as for duty purposes, as two pieces. This difference in method of counting cups and saucers alone would result in a considerable difference in the figures of quantity of all tableware reported in official statistics, because they represent a very large proportion of all articles imported. Further important differences in method of counting relate to teapots with covers, sugar bowls with covers, condiment sets, etc.

Several importers submitted statements showing comparative figures of quantity computed on the two bases for their imports in 1929 and 1930 (under the act of 1922). These figures show that in the aggregate the quantity of their imports in those periods, if computed on the basis of the count for duty purposes under the act of 1930, would be approximately 60 percent greater than the quantity on the basis actually used in reporting the official statistics. The Commission has not sufficient evidence to state whether the methods used for computing the quantity of imports under the act of 1922 were uniform

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throughout the country, or to state accordingly whether the percentage difference in count as reported by the above-mentioned importers is approximately correct for all imports.

Principal sources of imports

Table 6 summarizes the combined imports for consumption from principal sources of supply. The increasing percentages coming from Japan show that imports from that country constitute the primary problem in foreign competition with the domestic pottery industry.

Tables corresponding to table 6, showing separately imports of earthenware and stoneware, and of china and porcelain, not decorated and decorated, are given in the appendix.

TABLE 6.—*Earthenware, stoneware, china, and porcelain household table and kitchen articles: Imports for consumption, from principal sources, 1929–34*

	1929	1930	1931	1932	1933	1934
Quantity (dozens): [1]						
Japan	7,166,047	5,686,538	4,612,928	4,935,226	7,142,264	8,215,860
United Kingdom	1,540,426	1,173,260	893,954	749,714	773,924	742,898
Germany	3,083,567	2,285,402	1,057,494	671,446	584,179	380,341
Czechoslovakia	751,080	501,155	264,854	218,460	127,590	113,309
France	409,500	263,792	75,781	43,411	28,841	29,388
All other countries	927,643	447,178	218,036	145,370	136,177	158,655
Total	13,878,263	10,357,325	7,123,047	6,763,627	8,792,975	9,640,451
Value:						
Japan	$4,486,837	$3,653,934	$1,990,430	$1,145,109	$1,904,244	$3,179,614
United Kingdom	3,086,559	2,458,624	1,482,983	805,025	953,406	1,232,795
Germany	3,600,971	2,766,780	1,279,365	801,234	796,793	629,862
Czechoslovakia	887,111	540,432	274,210	220,458	149,867	161,961
France	844,379	602,571	208,937	104,413	72,414	81,961
All other countries	941,980	600,369	287,117	172,348	176,841	229,970
Total	13,847,837	10,622,710	5,523,042	3,248,587	4,053,565	5,516,163
Unit value: [1]						
Japan	$0.63	$0.64	$0.43	$0.23	$0.27	$0.39
United Kingdom	2.00	2.10	1.66	1.07	1.23	1.66
Germany	1.17	1.21	1.21	1.19	1.36	1.66
Czechoslovakia	1.18	1.08	1.04	1.01	1.17	1.43
France	2.06	2.28	2.76	2.41	2.51	2.79
All other countries	1.02	1.34	1.32	1.19	1.30	1.45
Average	1.00	1.03	.78	.48	.46	.57
Percent of total quantity:						
Japan	51.6	54.9	64.8	73.0	81.2	85.2
United Kingdom	11.1	11.3	12.5	11.1	8.8	7.7
Germany	22.2	22.1	14.8	9.9	6.6	3.9
Czechoslovakia	5.4	4.8	3.7	3.2	1.5	1.2
France	3.0	2.6	1.1	.6	.3	.3
All other countries	6.7	4.3	3.1	2.2	1.6	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percent of total value:						
Japan	32.4	34.4	36.0	35.3	47.0	57.7
United Kingdom	22.3	23.1	26.8	24.8	23.5	22.3
Germany	26.0	26.0	23.2	24.7	19.6	11.4
Czechoslovakia	6.4	5.1	5.0	6.7	3.7	2.9
France	6.1	5.7	3.8	3.2	1.8	1.5
All other countries	6.8	5.7	5.2	5.3	4.4	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

[1] Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in method of counting number of pieces. The unit values are consequently also not comparable.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

Table 7 affords a comparison of the imports for consumption, in quantity, from principal sources, of articles not decorated or colored, with those that are decorated or colored.

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Tables corresponding to table 7, showing separately imports of earthenware and stoneware, and of china and porcelain, are given in the appendix.

TABLE 7.—*Earthenware, stoneware, china, and porcelain household table and kitchen articles, not decorated and decorated: Summary of imports for consumption, from principal sources, 1929–34*

	Quantity (dozens) [1]						
	Czecho-slovakia	France	Germany	United Kingdom	Japan	All other countries	Total
1929							
Not decorated, colored, etc..	31,762	26,559	274,964	100,282	398,588	192,682	1,024,837
Decorated, colored, etc.....	719,318	382,941	2,808,603	1,440,144	6,767,459	734,961	12,853,426
Total.....	751,080	409,500	3,083,567	1,540,426	7,166,047	927,643	13,878,263
1930							
Not decorated, colored, etc..	19,154	6,710	206,387	52,251	251,192	36,171	571,865
Decorated, colored, etc.....	482,001	257,082	2,079,015	1,121,009	5,435,346	411,007	9,785,460
Total.....	501,155	263,792	2,285,402	1,173,260	5,686,538	447,178	10,357,325
1931							
Not decorated, colored, etc..	43,393	1,527	125,494	36,776	233,028	6,359	446,577
Decorated, colored, etc.....	221,461	74,254	932,000	857,178	4,379,900	211,677	6,676,470
Total.....	264,854	75,781	1,057,494	893,954	4,612,928	218,036	7,123,047
1932							
Not decorated, colored, etc..	8,791	2,091	78,326	30,647	394,123	5,111	519,089
Decorated, colored, etc.....	209,669	41,320	593,120	719,067	4,541,103	140,259	6,244,538
Total.....	218,460	43,411	671,446	749,714	4,935,226	145,370	6,763,627
1933							
Not decorated, colored, etc..	2,631	3,343	82,721	53,740	622,387	7,561	772,283
Decorated, colored, etc.....	124,959	25,498	501,458	720,184	6,519,877	128,616	8,020,592
Total.....	127,590	28,841	584,179	773,924	7,142,264	136,177	8,792,975
1934							
Not decorated, colored, etc..	7,790	3,870	57,907	30,293	730,989	14,527	818,376
Decorated, colored, etc.....	105,519	25,518	322,434	712,605	7,511,871	144,128	8,822,075
Total.....	113,309	29,388	380,341	742,898	8,215,860	158,655	9,640,451

[1] Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in method of counting number of pieces.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

Imports by months since January 1, 1933

Table 8 shows for each month since January 1, 1933, the total quantity and value of imports of household table and kitchen pottery (earthenware and china, undecorated and decorated articles combined) from Japan, from all other countries, and the combined total. It will be observed that the imports from Japan, which much exceed those from all other countries combined, were for both 1933 and 1934 much larger in the second half than in the first half of the year. These variations were not apparently due to seasonal causes. The increase in the second half of 1933 over the first corresponded with a general increase in the demand for pottery, reflected in a large gain in the sales of the domestic industry. For 1934 the increase during the second half year in the imports from Japan was apparently due in

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considerable part to the desire of importers to obtain as much pottery as possible before the anticipated advance in yen prices, which in fact was put into effect, as to certain important classes of pottery, on November 1 (the imports received in the United States in November were, of course, mostly shipped from Japan before Nov. 1). For the 3 months September, October, and November 1934, imports from Japan averaged about 926,000 dozen pieces per month as compared with an average of about 482,000 dozen pieces in the next 3 months and about 620,000 dozen for the first 8 months of the year. Imports from Japan for the 3 months September–November 1934 were 28 percent greater than for the same 3 months of 1933, whereas for all the other 9 months of the year the imports of 1934 were 9 percent greater than for the same months of 1933.

TABLE 8.—*Earthenware, stoneware, china, and porcelain household table and kitchen articles: Monthly imports for consumption from Japan and from all countries, 1933, 1934, and 1935 (2 months)*

	Quantity (dozen pieces)			Value		
	Japan	All other	Total	Japan	All other	Total
1933						
January	559,985	128,890	688,875	$108,947	$130,269	$239,216
February	351,556	162,502	514,058	63,352	160,788	224,140
March	525,141	159,402	684,543	113,267	170,385	283,652
April	557,188	115,003	672,191	114,809	120,987	235,796
May	557,477	124,999	682,476	129,174	149,826	279,000
June	559,945	109,964	669,909	145,305	134,837	280,142
July	640,988	125,731	766,719	162,050	153,448	315,498
August	648,887	152,045	800,932	198,949	192,935	391,884
September	705,889	132,644	838,533	221,088	211,481	432,569
October	832,767	155,506	988,273	273,915	257,203	531,118
November	636,106	169,364	805,470	201,234	268,819	470,053
December	566,335	114,661	680,996	172,154	198,343	370,497
Total, 12 months	7,142,284	1,650,711	8,792,975	1,904,244	2,149,321	4,053,565
1934						
January	800,159	114,172	914,331	257,051	180,816	437,867
February	557,117	137,886	695,003	203,632	217,891	421,523
March	512,448	134,140	646,588	206,415	217,856	424,271
April	524,876	114,429	639,305	213,744	186,819	400,563
May	527,012	122,165	649,177	204,371	208,274	412,645
June	582,443	123,837	706,280	220,061	201,006	421,067
July	728,771	99,117	827,888	283,726	177,076	460,802
August	737,823	114,482	852,305	278,643	180,220	458,863
September	952,291	114,147	1,066,438	397,514	188,200	585,714
October	909,365	118,207	1,027,572	382,976	193,581	576,557
November	916,898	137,066	1,053,964	348,737	224,322	573,059
December	466,657	94,943	561,600	182,744	160,488	343,232
Total, 12 months	8,215,860	1,424,591	9,640,451	3,179,614	2,336,549	5,516,163
1935						
January	497,596	106,639	604,235	199,134	168,465	367,599
February	481,226	117,122	598,348	208,791	168,638	377,429

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

Recent changes in imports of decorated articles from Japan

Table 9 shows the trend of imports from Japan of specific decorated articles and groups of articles in (a) January–June 1933, before the adoption of the code in the domestic industry; (b) July–December 1933, near the close of which period the code went into effect; and (c) January–June 1934.

The figures for quantity here shown were computed upon the basis of the Commission's analysis of invoices of selected concerns whose

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imports were considered representative of the composition of total imports from Japan, whereas the total value for all articles is that reported in official statistics.

The method used in computing the number of dozen pieces was as follows:

For each period the quantity and value of the imports of each article and group of articles were first transcribed from the original records of the several selected importers. The figures for all of these imports were then combined. With respect to decorated china dinnerware (sets and open stock), it was disclosed that practically all imports from Japan were accounted for by the data obtained from these importers. With regard to all other classes of decorated china articles, however, such as sets, cups and saucers, and plates of short-line tableware, and articles of kitchenware, the data transcribed from importers' records did not cover all imports from Japan. It was necessary, therefore, to compute the quantity for all imports of these articles from that country. As a first step the total value for the dinnerware was deducted from the total value of the imports from Japan of decorated household table and kitchen articles of china as reported in official statistics. The percentage ratio between this remainder and the total value obtained from importers' records for all articles other than dinnerware was determined, and this ratio was applied to the value for each article or group as obtained from the importers in order to arrive at an estimated value for all imports of such articles and groups from Japan. From these value totals the quantity for each article was computed from the average unit value as obtained from records of importers. The method used in arriving at the quantity of all imports of each selected earthenware article or group differed from that for china articles only in that it was necessary to make the estimates for dinnerware as well as for other classes. These computations of quantity are based upon the assumption that, with respect to imports from Japan, the relationship of all imports of each article and group shown in the table to total imports was the same as that shown by the data obtained from the records of selected importers.

Figures for quantity were computed by counting each separate piece. For example, a cup and saucer were counted as two pieces, a set comprising a creamer and a sugar bowl with cover as three pieces, etc.

Table 9 shows that imports from Japan of most classes of household pottery were greater in quantity in the second half than in the first half of 1933, and that the increase in value was much greater than that in quantity, prices in terms of dollars having advanced (chiefly by reason of the rise in yen exchange). On the other hand, the imports of most classes were smaller in quantity during the first half of 1934 than in the last 6 months of 1933; and for some articles, notably cups and saucers and two items of kitchenware, imports in the 1934 period were less than in the first half of 1933. The fact that the relative numbers showing the ratio of imports in the first half of 1934 to those in the last half of 1933 were nearly all higher for value than for quantity reflects further rise in prices, in this case chiefly the result of advances in terms of yen.

It should be noted that for some classes of pottery, notably cups and saucers, the sharp increase in imports from Japan in the second

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half of 1933 and the sharp decrease in the first half of 1934 were to some extent due to the fact that the prices of the Japanese pottery were increased in the latter part of 1933 and on January 1, 1934. Importers, anticipating this increase in prices, brought in exceptionally large quantities during September, October, and November 1933, and during January 1934 (the articles arriving in November having practically all been purchased before the price advance of November 1 and those arriving in January before the advance of January 1). From February to June 1934, with higher prices in effect imports were much smaller. This movement is brought out in table 8, showing monthly imports. Attention has already been called to the fact that a similar cause affected, in a more conspicuous manner, the imports in the latter part of 1934.

Tables showing separate data for earthenware and stoneware articles and for china and porcelain articles, corresponding to those of table 9, are given in the appendix.

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TABLE 9.—*Earthenware, stoneware, china, and porcelain household table and kitchen articles, decorated, colored, etc.: Trend of imports from Japan of specific articles and groups of articles in specified periods, and ratios of imports of such articles and groups in a specified period to imports (1) in 1933 (July–December), and (2) in 1933 (January–June)*

Item	1933 (January–June)		1933 (July–December)		1934 (January–June)		Ratio to 1933 (July–December) 100 percent		Ratio to 1933 (January–June) 100 percent			
	Quantity	Value	Quantity	Value	Quantity	Value	1934 (January–June)		1933 (July–December)		1934 (January–June)	
	Dozen pieces		Dozen pieces		Dozen pieces		Dozen pieces	Value	Dozen pieces	Value	Dozen pieces	Value
							Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Dinnerware	342,768	$242,955	426,369	$413,131	551,443	$573,651	129.3	138.9	124.4	170.0	160.9	236.1
Sets	286,163	194,447	361,846	345,010	463,321	486,936	128.0	141.1	126.4	177.4	161.9	250.4
Open stock	56,605	48,508	64,523	68,121	88,122	86,715	136.6	127.3	114.0	140.4	155.7	178.8
Short-line tableware	1,751,024	313,498	2,738,934	655,552	1,823,213	561,150	66.6	85.6	156.4	209.1	104.1	179.0
Sets	231,200	43,297	464,059	115,268	364,337	114,192	78.5	99.1	200.7	266.2	157.6	263.7
Other	1,519,824	270,201	2,274,875	540,284	1,458,876	446,958	64.1	82.7	149.7	260.0	96.0	165.4
A. D. cups and saucers in pairs	47,306	3,809	68,464	5,977	86,564	10,478	126.4	175.3	144.7	156.9	183.0	275.1
A. D. cups only	119	29			162	28	(1)	(1)	(1)	(1)	136.1	96.6
A. D. saucers only					94	13	(1)	(1)			(2)	(2)
Other cups and saucers in pairs	864,632	98,933	1,322,884	198,865	529,264	107,840	40.0	54.2	153.0	201.0	61.2	109.0
Other cups only	10,813	1,445	23,506	4,055	7,196	1,754	30.6	43.3	217.4	280.6	66.5	121.4
Other saucers only	356	88	262	91	1,243	284	474.4	312.1	73.6	102.4	349.2	322.7
Total cups and saucers in pairs	911,938	102,742	1,391,348	204,842	615,828	118,318	44.3	57.8	152.6	190.4	67.5	115.2
Total cups and saucers	923,226	104,304	1,415,116	208,988	624,523	120,397	44.1	57.6	153.3	200.4	67.6	115.4
Plates	27,851	6,593	39,488	16,177	85,566	36,834	216.7	227.7	141.8	245.4	307.2	558.7
Teapots with covers (2 pieces)	108,750	31,793	254,036	86,039	151,990	60,752	59.8	70.6	233.6	270.6	139.8	191.1
Sugars and creamers (3 pieces)	21,042	4,295	28,845	6,290	26,961	8,369	93.5	133.1	137.1	146.4	128.1	194.9
Mugs and steins	133,559	29,239	107,404	28,604	47,012	16,183	43.8	56.6	80.4	97.8	35.2	55.3
Salts and peppers (2 pieces)	56,188	6,686	21,188	2,830	175,036	13,680	826.1	483.4	37.7	42.3	311.5	204.6
Cookie jars and covers (2 pieces)	65,582	26,853	109,088	58,815	32,806	26,499	30.1	45.1	166.3	219.0	50.0	98.7
All other tableware	183,626	80,438	299,710	132,541	314,982	164,244	105.1	123.9	163.2	219.3	171.5	271.8
Total dinnerware and short-line tableware	2,093,792	556,453	3,165,303	1,068,683	2,374,656	1,134,801	75.0	106.2	151.2	192.1	113.4	203.9

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Kitchenware	**379,802**	**89,990**	**385,200**	**120,055**	**308,669**	**111,787**	**80.1**	**93.1**	**101.4**	**133.4**	**81.3**	**124.2**
Cereal sets	97,240	18,021	44,698	17,184	38,930	13,332	87.1	77.6	46.0	95.4	40.0	74.0
Bowls	31,130	11,691	101,973	27,476	70,018	24,084	68.7	87.7	327.6	235.0	224.9	206.0
Ice-box and range sets	116,314	23,599	70,945	23,454	62,455	17,353	88.0	74.0	61.0	99.4	53.7	73.5
Other kitchenware	135,118	36,679	167,584	51,941	137,266	57,018	81.9	109.8	124.0	141.6	101.6	155.5
Total table and kitchenware	2,473,594	646,443	3,550,503	1,188,738	2,683,325	1,246,588	75.6	104.9	143.5	183.9	108.5	192.8
Summary of cups and saucers, and plates (quantity only) included in the above:												
Cups and saucers	1,142,342	----------	1,766,440	----------	958,233	----------	54.2	----------	154.6	----------	83.9	----------
Dinnerware:												
Parts of sets	76,106	----------	92,818	----------	121,408	----------	130.8	----------	122.0	----------	159.5	----------
Open stock	14,484	----------	13,106	----------	17,182	----------	131.1	----------	90.5	----------	118.6	----------
Short-line tableware:												
Parts of sets	128,526	----------	245,400	----------	195,120	----------	79.5	----------	190.9	----------	151.8	----------
Other	923,226	----------	1,415,116	----------	624,523	----------	44.1	----------	153.3	----------	67.6	----------
Plates	232,032	----------	341,697	----------	412,793	----------	120.8	----------	147.3	----------	177.9	----------
Dinnerware:												
Parts of sets	132,218	----------	164,885	----------	211,348	----------	128.2	----------	124.7	----------	159.8	----------
Open stock	26,666	----------	31,614	----------	39,691	----------	125.5	----------	118.6	----------	148.8	----------
Short-line tableware:												
Parts of sets	45,297	----------	105,710	----------	76,188	----------	72.1	----------	233.4	----------	168.2	----------
Other	27,851	----------	39,488	----------	85,566	----------	216.7	----------	141.8	----------	307.2	----------

[1] No imports recorded in the second half of 1933.
[2] No imports recorded in the first half of 1933.

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Relative importance of different articles in imports of decorated ware from Japan

Table 10 shows the ratios of imports of the several articles and groups of articles to total imports of decorated ware from Japan. For each of the three periods, cups and saucers (not parts of dinner, tea, and other sets) represented in number of pieces a far larger proportion of all imports from Japan than any other individual article, but this proportion has varied sharply, in the first 6 months of 1933 being about 37 percent, in the second 6 months about 40 percent, and in the first 6 months of 1934 about 23 percent of the total.

Dinnerware in the form of complete sets, constituting about 11½ percent and 10 percent, respectively, of all imports in the first and last half of 1933, increased to about 17 percent in the first half of 1934. Sets (other than dinner sets), mainly china tea sets, increased from about 9 percent in the first half of 1933 to about 13 percent in the last half of that year, and to about 13½ percent in the first half of 1934.

Kitchenware as a whole was respectively about 15 percent, 11 percent, and 11½ percent of all imports in these three periods.

Tables showing corresponding data separately for earthenware and stoneware, and for china and porcelain, are given in the appendix.

TABLE 10.—*Earthenware, stoneware, china, and porcelain household table and kitchen articles, decorated, colored, etc.: Percentage distribution of imports from Japan according to articles and groups, 1933 and 1934 (6 months)*

	1933 (January-June)		1933 (July-December)		1934 (January-June)	
	Quantity	Value	Quantity	Value	Quantity	Value
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Dinnerware	13.9	37.6	12.0	34.8	20.6	46.0
Sets	11.6	30.1	10.2	29.0	17.3	39.1
Open stock	2.3	7.5	1.8	5.8	3.3	6.9
Short-line tableware	70.8	48.5	77.1	55.1	67.9	45.0
Sets	9.4	6.7	13.0	9.7	13.5	9.2
Other	61.4	41.8	64.1	45.4	54.4	35.8
A. D. cups and saucers in pairs	1.9	.6	1.9	.5	3.3	.8
A. D. cups only	(1)	(1)			(1)	(1)
A. D. saucers only					(1)	(1)
Other cups and saucers in pairs	35.0	15.3	37.3	16.7	19.7	8.7
Other cups only	.4	.2	.7	.4	.3	.1
Other saucers only	(1)	(1)	(1)	(1)	(1)	(1)
Total cups and saucers in pairs	36.9	15.9	39.2	17.2	23.0	9.5
Total cups and saucers	37.3	16.1	39.9	17.6	23.3	9.6
Plates	1.1	1.0	1.1	1.4	3.2	2.9
Teapots with covers	4.4	4.9	7.2	7.2	5.7	4.9
Sugars and creamers (sets)	.8	.7	.8	.5	1.0	.7
Mugs and steins	5.4	4.5	3.0	2.4	1.8	1.3
Salts and peppers	2.3	1.0	.6	.2	6.5	1.1
Cookie jars with covers	2.7	4.2	3.1	4.9	1.2	2.1
All other tableware	7.4	9.4	8.4	11.2	11.7	13.2
Total, dinnerware and short-line tableware	84.7	86.1	89.1	89.9	88.5	91.0
Kitchenware	15.3	13.9	10.9	10.1	11.5	9.0
Cereal sets	3.9	2.8	1.3	1.4	1.5	1.1
Bowls	1.2	1.8	2.9	2.3	2.6	1.9
Ice-box and range sets	4.7	3.6	2.0	2.0	2.3	1.4
Other kitchenware	5.5	5.7	4.7	4.4	5.1	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

[1] Less than 1/10 of 1 percent.

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SALES BY DOMESTIC PRODUCERS

Comparison of sales of undecorated and decorated tableware

Table 11 is a summary of the sales of domestic household table and kitchen pottery for specified periods, distinguishing undecorated from decorated ware. Sales of the very high grade domestic china, usually known as "Belleek", are not included, because most, if not all, of the china imported from Japan is of a much lower price level and is not directly competitive with that domestic product. In considering the data in this table, it should be borne in mind that the code in the domestic pottery industry went into effect in December 1933.

The table distinguishes three groups of companies. Group 1 comprises those producing earthenware, the annual sales of which were $800,000 or more; group 2 comprises those producing earthenware, with annual sales less than that amount; and group 3, those producing china.

The values here shown were obtained direct from the records of producers and by questionnaire. The quantities were computed on the basis of these values; the method used in computing them is given in the text accompanying table 13. The data shown for all periods except 1929 represent practically the entire industry, only two companies, relatively small, declining to supply data concerning their operations. A number of manufacturers of earthenware, some comparatively large companies, which were operating in 1929, discontinued production after that year, and records concerning their sales were not available. Figures for that year obtained by the Commission from producers now active, accordingly, were considerably less than the actual totals. The census figures for total value of sales for the earthenware (semivitreous china) industry, together with the value of sales of china household table and kitchen articles obtained from producers, were taken, therefore, as the value of sales for the industry in that year. The total quantity for 1929 is calculated from this total value by the use of average unit values determined by the Commission from producers' records.

This table shows that for all years specified, taken together, sales of ware not decorated or colored represented in quantity about 22 percent of total sales. As previously stated, ware not decorated or colored represents less than 10 percent in quantity of all imports from Japan.

Particular interest attaches to the figures for sales in 1933 and 1934, the code of fair competition having gone into effect near the close of 1933. The sales of decorated and undecorated ware combined increased from 8,655,000 dozen pieces in the first half of 1933 to 11,330,000 in the second half, or by about 30 percent; they fell to 10,107,000 dozens in the first half of 1934, a figure about 11 percent less than for the second half of 1933 and about 17 percent greater than for the first half of 1933.

Data as to quantity of sales are not available for the second half of 1934, but figures for value have been obtained. For the companies covered by table 11 (not quite the entire number in the industry), the value of sales in the second half of 1934 was approximately the same as in the first half. No important changes in price took place in the second half of 1934, and it is probable, therefore, that the number of pieces sold was substantially the same (although the change in the number of pieces might not be precisely parallel with the change in the value because of shifts in the relative importance of sales of articles of different unit values).

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TABLE 11.—*Earthenware and china household table and kitchen articles: Sales of domestic articles, by groups of companies, for specified periods*

	Values obtained from records of the respective companies and computed quantities based upon such values										Quantity[1]	Value added for difference between census and company figures for total sales	Total 1929 based upon census figures	
	Group I		Group II		Groups I and II		Group III		Total, all groups				Quantity	Value
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value				
1929	*Dozen pieces*		*Dozen pieces*		*Dozen pieces*		*Dozen pieces*		*Dozen pieces*		*Dozen pieces*		*Dozen pieces*	
Undecorated and decorated	16,772,028	$15,222,495	6,521,491	$7,199,020	23,293,519	$22,421,515	107,060	$448,405	23,400,579	$22,869,920	9,682,251	$9,360,695	33,082,830	$32,230,615
Undecorated	5,038,842	3,031,690	737,774	458,685	5,776,616	3,490,375	257	535	5,776,873	3,490,910	2,397,361	1,448,703	8,174,234	4,939,613
Decorated	11,733,186	12,190,805	5,783,717	6,740,335	17,516,903	18,931,140	106,803	447,870	17,623,706	19,379,010	7,284,890	7,911,992	24,908,596	27,291,002
1932														
Undecorated and decorated	11,605,127	9,434,843	4,611,956	4,461,305	16,217,083	13,896,148	73,627	269,615	16,290,710	14,165,763				
Undecorated	2,499,068	1,288,981	907,698	479,714	3,406,766	1,768,695	181	261	3,406,947	1,768,956				
Decorated	9,106,059	8,145,862	3,704,258	3,981,591	12,810,317	12,127,453	73,446	269,354	12,883,763	12,396,807				
1933														
Undecorated and decorated	14,486,088	10,514,276	5,399,287	4,840,278	19,885,375	15,354,554	99,839	322,630	19,985,214	15,677,184				
(January–June)														
Undecorated and decorated	6,181,887	4,366,639	2,436,017	2,079,306	8,617,904	6,445,945	36,934	115,740	8,654,838	6,561,685				
Undecorated	1,437,135	682,035	577,975	289,564	2,015,110	971,599	None	None	2,015,110	971,599				
Decorated	4,744,752	3,684,604	1,858,042	1,789,742	6,602,794	5,474,346	36,934	115,740	6,639,728	5,590,086				
(July–December)														
Undecorated and decorated	8,304,201	6,147,637	2,963,270	2,760,972	11,267,471	8,908,609	62,905	206,890	11,330,376	9,115,499				
Undecorated	1,842,759	904,202	624,858	333,554	2,467,617	1,237,756	None	None	2,467,617	1,237,756				
Decorated	6,461,442	5,243,435	2,338,412	2,427,418	8,799,854	7,670,853	62,905	206,890	8,862,759	7,877,743				
1934 (January–June)														
Undecorated and decorated	7,324,956	6,235,698	2,689,711	2,798,694	10,014,667	9,034,392	91,986	295,648	10,106,653	9,330,040				
Undecorated	1,763,237	1,001,035	400,214	265,682	2,163,451	1,266,717	None	None	2,163,451	1,266,717				
Decorated	5,561,719	5,234,663	2,289,497	2,533,012	7,851,216	7,767,675	91,986	295,648	7,943,202	8,063,323				

[1] Computed quantity represented by difference between census figures and company figures of value for total sales.

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Analysis of clay shop production

Table 12 gives an analysis of the tableware articles produced in the clay shop by 14 semivitreous china companies in the 6-month period July–December 1933. These figures (which are for the ware before it is fired) indicate the relative importance of the various articles produced in the semivitreous china branch of the domestic industry, as well as the kind and relative importance of the various dinnerware articles comprising the group classified as "all other articles" in table 13.

Tableware plates of all kinds represented about 30 percent, and tableware cups and saucers about 43 percent of all table and kitchen articles produced in that period by these companies.

Similar details concerning kitchenware cannot be shown without disclosing the transactions of individual companies.

TABLE 12.—*Earthenware (semivitreous) household table and kitchen articles: Analysis of clay shop production of 14 companies for the 6-month period July–December 1933*

Item	Quantity, dozen pieces	Ratio to total
		Percent
Tableware	12,404,497	96.30
Plates, all sizes	3,921,234	30.44
Cups and saucers	5,599,819	43.46
After dinner cups	4,550	.04
All other cups	3,290,373	25.53
Total cups	3,294,923	25.57
After dinner saucers	2,820	.02
All other saucers	2,302,976	17.87
Total saucers	2,304,896	17.89
Fruits and cereals	1,615,238	12.53
Bowls, nappies, and bakers	611,463	4.75
Dishes (platters)	238,101	1.85
Casseroles, complete	9,071	.07
Casserole bodies	9,762	.08
Casserole covers	9,028	.07
Children's mugs	12,672	.10
Baby plates	1,006	.01
Creamers, with covers	3,310	.03
Creamer bodies	47,998	.37
Individual creamers	7,647	.06
Egg cups	6,929	.05
Jugs	40,568	.31
Pickles	7,862	.06
Sugars, with covers	33,933	.26
Sugar bodies	42,798	.33
Sugar covers	32,111	.25
Individual sugars	10,328	.08
Teapots, with covers	2,047	.02
Teapot bodies	1,143	.01
Teapot covers	1,046	.01
Sauceboats	25,385	.20
With fast stand	1,301	.01
Regular (no stand)	24,084	.19
Mugs, lunch, beer, etc	40,010	.31
Covered butters (complete—3 pieces)	198	----------
Covered butter bodies	3,722	.03
Covered butter covers	2,537	.02
Individual butters	2,095	.02
Jellies	2,527	.03
Cream soup stands	5,421	.04
All other articles	57,488	.45
Kitchenware (ovenware)	478,890	3.70
Tableware and kitchenware	12,883,387	100.00

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Recent changes in sales of decorated articles

Table 13 shows the recent trend of sales of specific domestic household table and kitchen decorated articles of earthenware (semivitreous type) and of china (except so-called "Belleek china"). It distinguishes three half-year periods, those for 1933 preceding and that for 1934 following the adoption of the code.

The figures of value for dinnerware and kitchenware as a whole were obtained direct from the records of producers, and by questionnaire. However, it was impracticable to tabulate all sales of the selected producers by articles, as was done for all imports of Japanese articles by the concerns from whose records data were taken. It was necessary, therefore, to compute the total sales of each class on the basis of a partial tabulation of sales. The figures of quantity were computed on the basis of average unit values, obtained direct from the records of producers. The method used was, in principle, the same as that used for imports from Japan. (See text accompanying table 9.)

Separate figures in detail for the earthenware and for the china articles, which have been combined in this table, cannot be shown without disclosing the operations of individual concerns. It may be said, however, that china articles represent in number of pieces a negligible proportion of all sales (about 1 percent).

Table 13 shows that, for all decorated and colored household table and kitchen pottery, the sales in the first 6 months of 1934 were 19.6 percent greater in number of pieces than in the first half of 1933, but 10.4 percent less than in the last 6 months of 1933. The increase of 19.6 percent over January–June 1933 compares with an increase of 8.5 percent in the quantity of imports of such articles from Japan. (See table 9.) The increase in domestic sales of dinnerware sets between these two periods was 3.9 percent, in sales of other dinnerware 17.7 percent, and in kitchenware nearly 1,000 percent.

Data of quantity of sales of decorated ware for the second half of 1934 are not available. As already stated, the value of sales of decorated and undecorated ware combined in that half-year was substantially the same as in the first half. Since there was little change in prices, and since decorated ware is the dominant part of the business, it is probable that the total sales of decorated articles in the second half of 1934 did not differ widely in quantity from those in the first half. There were no doubt changes, in one direction or the other, in individual articles and groups.

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TABLE 13.—*Earthenware and china household table and kitchen articles, decorated, colored, etc.: Trend of sales of specific articles and groups of articles by domestic producers, 1933 and 1934 (6 months)*

Item	1933 (January-June)		1933 (July-December)		1934 (January-June)		Ratio to 1933 (July-December) 100 percent				Ratio to 1933 (January-June) 100 percent			
							1933 (January-June)		1934 (January-June)		1933 (July-December)		1934 (January-June)	
	Quantity	Value	Quantity	Value	Quantity	Value	Dozen pieces	Value	Dozen pieces	Value	Dozen pieces	Value	Dozen pieces	Value
	Dozen pieces		*Dozen pieces*		*Dozen pieces*		*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Dinnerware and kitchenware	6,639,728	$5,590,086	8,862,759	$7,877,743	7,943,202	$8,063,323	74.9	71.0	89.6	102.4	133.5	140.9	119.6	144.2
Dinnerware	6,589,625	5,444,660	8,491,432	7,325,724	7,399,430	7,185,823	77.6	74.3	87.1	98.1	128.9	134.5	112.3	132.0
Sets	2,579,704	2,075,867	3,414,096	3,030,110	2,681,406	2,841,810	75.6	68.5	78.5	93.8	132.3	146.0	103.9	136.9
Not over 31 pieces	507,455	334,693	519,956	355,671	185,066	160,433	97.6	94.1	35.6	45.1	102.5	106.3	36.5	47.9
32 pieces	1,009,608	731,821	1,449,250	1,131,746	1,160,672	1,079,652	69.7	64.7	80.1	95.4	143.5	154.6	115.0	147.5
33 to 52 pieces	383,140	305,111	433,723	372,885	335,854	329,487	88.3	81.8	77.4	88.4	113.2	122.2	87.7	108.0
53 to 56 pieces	300,897	275,469	441,921	476,254	436,589	553,959	68.1	57.8	98.8	116.3	146.9	172.9	145.1	201.1
57 to 62 pieces	53,876	47,372	76,525	104,378	16,100	24,208	70.4	45.4	21.0	23.2	142.0	220.3	29.9	51.1
63 to 66 pieces	45,485	47,510	50,036	60,888	18,968	27,337	90.9	78.0	37.9	44.9	110.0	128.2	41.7	57.5
67 to 92 pieces	4,360	6,629	25,076	35,063	53,314	57,260	17.4	18.9	212.6	163.3	575.1	528.9	1,222.8	863.8
93 to 96 pieces	121,966	136,087	204,621	231,312	284,457	357,833	59.6	58.8	139.0	154.7	167.8	170.0	233.2	262.9
97 pieces and over	152,917	191,175	212,988	261,913	190,386	251,641	71.8	73.0	89.4	96.1	139.3	137.0	124.5	131.6
Other	4,009,921	3,368,793	5,077,336	4,295,614	4,718,024	4,344,013	79.0	78.4	92.9	101.1	126.6	127.5	117.7	128.9
Cups and saucers	1,515,495	992,179	2,082,181	1,289,939	1,817,510	1,274,550	72.8	76.9	87.3	98.8	137.4	130.0	119.9	128.5
Cups and saucers (pairs)	610,694	400,976	1,035,436	574,886	875,480	586,745	59.0	69.7	84.6	102.1	169.6	143.4	143.4	146.3
Cups	513,962	417,963	593,460	508,586	537,076	486,083	86.6	82.2	90.5	95.6	115.5	121.7	104.5	116.3
Saucers	390,839	173,240	453,285	206,517	404,954	201,722	86.2	83.9	89.3	97.7	116.0	119.2	103.6	116.4
Plates	1,288,182	1,099,918	1,518,153	1,417,766	1,555,918	1,500,768	84.9	77.6	102.5	105.9	117.9	128.9	120.8	136.4
All other articles	1,206,244	1,276,696	1,477,002	1,587,859	1,344,596	1,568,695	81.7	80.4	91.0	98.8	122.4	124.4	111.5	122.9
Kitchenware	50,103	145,426	371,327	552,019	543,772	877,500	13.5	26.3	146.4	159.0	741.1	379.6	1,085.3	603.4
Summary of cups and saucers, and plates, included in dinnerware above:														
Cups and saucers	2,414,393		3,270,417		2,675,254		73.8		81.8		135.5		110.8	
Parts of dinner sets	898,898		1,188,236		857,744		75.6		72.2		132.2		95.4	
All other	1,515,495		2,082,181		1,817,510		72.8		87.3		137.4		119.9	
Plates	2,330,324		2,900,187		2,689,439		80.4		92.7		124.5		115.4	
Parts of dinner sets	1,042,142		1,382,034		1,133,521		75.4		82.0		132.6		108.8	
All other	1,288,182		1,518,153		1,555,918		84.9		102.5		117.9		120.8	

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Table 14 shows the ratios of sales of specific articles and groups to total sales during each of the three periods. The figures show that dinner sets of 32 pieces predominated in sales of complete dinner sets, and that cups and saucers and plates not sold as parts of sets were the other most important items. The many different items comprising the group classified as "all other articles" are indicated in the analysis of clay shop production shown in table 12.

TABLE 14.—*Earthenware and china household table and kitchen articles, decorated colored, etc.: Percentage distribution of sales by domestic producers according to articles and groups, 1933 and 1934 (6 months)*

Item	1933 (January-June)		1933 (July-December)		1934 (January-June)	
	Quantity	Value	Quantity	Value	Quantity	Value
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Dinnerware and kitchenware	100.0	100.0	100.0	100.0	100.0	100.0
Dinnerware	99.2	97.4	95.8	93.0	93.2	89.1
Sets	38.8	37.1	38.5	38.5	33.8	35.2
Not over 31 pieces	7.6	6.0	5.9	4.5	2.3	2.0
32 pieces	15.2	13.1	16.3	14.4	14.6	13.4
33 to 52 pieces	5.8	5.5	4.9	4.7	4.2	4.1
53 to 56 pieces	4.5	4.9	5.0	6.0	5.5	6.9
57 to 62 pieces	.8	.8	.8	1.3	.2	.3
63 to 66 pieces	.7	.9	.6	.8	.3	.3
67 to 92 pieces	.1	.1	.3	.5	.7	.7
93 to 96 pieces	1.8	2.4	2.3	3.0	3.6	4.4
97 pieces and over	2.3	3.4	2.4	3.3	2.4	3.1
Other	60.4	60.3	57.3	54.5	59.4	53.9
Cups and saucers	22.8	17.8	23.5	16.4	22.9	15.8
Cups and saucers (sold in pairs)	9.2	7.2	11.7	7.3	11.0	7.3
Cups alone	7.7	7.5	6.7	6.5	6.8	6.0
Saucers alone	5.9	3.1	5.1	2.6	5.1	2.5
Plates	19.4	19.7	17.1	18.0	19.6	18.6
All other articles	18.2	22.8	16.7	20.1	16.9	19.5
Kitchenware	.8	2.6	4.2	7.0	6.8	10.9
Summary of cups and saucers, and plates, included in dinnerware above:						
Cups and saucers, and plates	71.5	.....	69.6	.....	67.5	.....
Cups and saucers	36.4	.....	36.9	.....	33.7	.....
Parts of dinner sets	13.6	.....	13.4	.....	10.8	.....
All other	22.8	.....	23.5	.....	22.9	.....
Plates	35.1	.....	32.7	.....	33.8	.....
Parts of dinner sets	15.7	.....	15.6	.....	14.2	.....
All other	19.4	.....	17.1	.....	19.6	.....

COMPARISON OF CHANGES IN IMPORTS AND IN SALES OF DOMESTIC PRODUCERS

Changes since 1929

As already pointed out (see p. 28) the figures for quantity of imports of pottery prior to the act of 1930 for purposes of comparison with the figures for imports under the act of 1930, were probably greatly understated, articles of two or more pieces which would now be counted separately having then, at least as a frequent practice, been counted

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as one piece. The effect of price and exchange fluctuations makes it impracticable to measure relative quantitative trends of domestic sales and of imports from changes in the totals of values.

There is reason to believe, however, that the ratio of the quantity of imports to the quantity of domestic production and sales of household table and kitchen pottery has fallen appreciably since 1929. The total sales of household table and kitchen pottery by domestic producers (earthenware and china together) in 1929 were about 33,100,000 dozen pieces, each piece in any set being counted separately. Imports from all countries in that year, as reported, were 13,878,000 dozen. Imports as thus reported were equal to about 30 percent of the apparent consumption (sum of domestic sales and imports, amounting to about 47,000,000 dozen). If, however, the number of pieces imported had been counted in the same way as in domestic sales, the ratio would have been materially higher, since the figure for imports would probably have been somewhere between 40 and 60 percent greater than actually reported. The share of imports in United States consumption in 1929 was probably at least 35 percent, possibly as high as 40 percent. For the year 1933 and the first half of 1934, sales of domestic household table and kitchen pottery totaled 30,092,000 dozen pieces and the imports from all countries 13,044,000 dozen pieces, imports thus being about 30 percent of the apparent consumption. It seems probable, therefore, that the share of consumption supplied by imports has fallen materially since 1929.

Trend of domestic sales and of imports in 1933 and 1934

The code of fair competition in the domestic pottery industry went into effect in December 1933. Table 15 shows by half-year periods the changes in sales of domestic household table and kitchen articles (both earthenware and china) and in imports from all countries, in terms of quantity. The quantity of domestic sales for the second half of 1934 (shown without attempting to distinguish decorated from undecorated ware) is estimated to have been the same as for the first half of the year. This is a rather rough estimate, based on the fact that the total value of the sales of the domestic producers was practically the same as in the first half of 1934 and that no important changes in prices are known to have taken place. The table shows that for decorated and undecorated ware combined, the share of imports in apparent consumption in the United States fell slightly from period to period down to the middle of 1934, being 31.1 percent for the first half of 1933, 30.1 percent for the second half, and 29.6 percent for the first half of 1934. In the second half of 1934 imports increased while domestic production was substantially stationary, and the ratio of imports to apparent consumption rose to about 35 percent.

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TABLE 15.—*Earthenware, stoneware, china, and porcelain household table and kitchen articles, not decorated, and decorated: Imports from all countries compared with sales of domestic producers, 1933 and 1934*

	Quantity (dozen pieces)			Ratio of imports to—	
	Sales of domestic	Imports from all countries	Imports, and sales of domestic combined (consumption)	Sales of domestic	Consumption
Not decorated:					
1933:				*Percent*	*Percent*
January-June	2,015,110	363,973	2,379,083	18.1	15.3
July-December	2,467,617	408,410	2,876,027	16.6	14.2
Total	4,482,727	772,383	5,255,110	17.2	14.7
1934:					
January-June	2,163,451	447,782	2,611,233	20.7	17.1
July-December	(1)	370,594	(1)		
Total		818,376			
Decorated:					
1933:					
January-June	6,639,728	3,548,079	10,187,807	53.4	34.8
July-December	8,862,759	4,472,513	13,335,272	50.5	33.5
Total	15,502,487	8,020,592	23,523,079	51.7	34.1
1934:					
January-June	7,943,202	3,802,907	11,746,109	47.9	32.4
July-December	(1)	5,019,173	(1)		
Total		8,822,080			
Not decorated and decorated:					
1933:					
January-June	8,654,838	3,912,052	12,566,890	45.2	31.1
July-December	11,330,376	4,880,923	16,211,299	43.1	30.1
Total	19,985,214	8,792,975	28,778,189	44.0	30.6
1934:					
January-June	10,106,653	4,250,684	14,357,337	42.1	29.6
July-December	[2] 10,107,000	5,389,767	15,496,767	53.3	34.8
Total	20,213,653	9,640,451	29,854,104	47.7	32.3

[1] Not available.
[2] Estimated.

Figures for domestic sales are based upon Commission's analysis; for the second half of 1934 they are estimated roughly from total value of all sales.
Figures for imports are those given in official statistics.

Table 15a is similar to table 15 except that it compares domestic sales with imports from Japan alone. Since Japan supplies the great bulk of imports, in terms of quantity, the ratios of imports to consumption, although somewhat lower than those based on imports from all countries combined, show approximately the same movements. For decorated and undecorated ware together, imports from Japan represented in the first half of 1933, 26.4 percent of the apparent consumption of domestic and Japanese articles, in the second half of the year 26.2 percent, in the first half of 1934, 25.7 percent, and in the second half of the year (approximate estimate) about 32 percent.

The sharp increase in the share of imports from Japan in apparent consumption in the second half of 1934 was apparently due chiefly to the effort of importers to buy large quantities of Japanese pottery before the advance in yen prices prescribed by the exporters' association in Japan as to certain important classes to take effect on November 1. As already pointed out (see p. 30), imports from

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Japan in the 3 months September, October, and November (arrivals in November having for the most part been purchased prior to Nov. 1) were much larger than in the preceding months of 1934 or in the same 3 months of 1933. After November the imports from Japan fell sharply and the share of imports in apparent consumption in the 3 months December 1934 and January and February 1935 was probably lower than at any other time at least for the last 2 or 3 years.

For decorated ware the share of imports from Japan in apparent consumption of domestic and Japanese articles in the first half of 1934, following adoption of the code, was 28.2 percent as compared with 29.5 percent in the last half of 1933. Sales of domestic producers in the last half of 1934 are not shown separately in the table for decorated and undecorated ware.

TABLE 15a.—*Earthenware, stoneware, china, and porcelain household table and kitchen articles, not decorated, and decorated: Imports from Japan compared with sales of domestic pottery, 1933 and 1934*

	Quantity (dozen pieces)			Ratio of imports from Japan to—	
	Sales of domestic	Imports from Japan	Imports, and sales of domestic combined (consumption)	Sales of domestic	Consumption
				Percent	*Percent*
Not decorated:					
1933:					
January-June	2,015,110	296,575	2,311,685	14.7	12.8
July-December	2,467,617	325,812	2,793,429	13.2	11.7
Total	4,482,727	622,387	5,105,114	13.9	12.2
1934:					
January-June	2,163,451	385,282	2,548,733	17.8	15.1
July-December	(1)	318,707	(1)	----------	----------
Total	----------	703,989	----------	----------	----------
Decorated:					
1933:					
January-June	6,639,728	2,814,717	9,454,445	42.4	29.8
July-December	8,862,759	3,705,160	12,567,919	41.8	29.5
Total	15,502,487	6,519,877	22,022,364	42.1	29.6
1934:					
January-June	7,943,202	3,118,773	11,061,975	39.3	28.2
July-December	(1)	4,393,098	(1)	----------	----------
Total	----------	7,511,871	----------	----------	----------
Not decorated and decorated:					
1933:					
January-June	8,654,838	3,111,292	11,766,130	35.9	26.4
July-December	11,330,376	4,030,972	15,361,348	35.6	26.2
Total	19,985,214	7,142,264	27,127,478	35.7	26.3
1934:					
January-June	10,106,653	3,504,055	13,610,708	34.7	25.7
July-December	[2] 10,107,000	4,711,805	14,818,805	46.6	31.8
Total	20,213,653	8,215,860	28,429,513	40.6	28.9

[1] Not available.
[2] Estimated.

Figures for domestic sales are based upon the Commission's analysis; for the second half of 1934 they are estimated roughly from total value of all sales.
Figures for imports are those given in official statistics.

Table 15b shows for 1932 and by half years for 1933 and 1934 the total apparent consumption of household table and kitchen pottery

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in the United States distributed among (*a*) sales of domestic producers, (*b*) imports from Japan, and (*c*) imports from other countries. It will be seen that the share supplied by countries other than Japan fell, for decorated and undecorated articles combined, from 7.9 percent in 1932 (already a lower figure than in earlier years) to 6.4 percent in the first half of 1933 and to 4.4 percent in the last half of 1934. It thus appears that the competition of Japanese pottery in the United States market has affected European suppliers relatively more than domestic producers.

TABLE 15b.—*Household table and kitchen pottery: Sales of domestic producers, imports from Japan, imports from other countries, and total apparent consumption, for specified periods*

	Quantity (thousands of dozens)					Percent of apparent consumption		
	Apparent consumption	Sales of domestic	Imports from—			Sales of domestic	Imports from Japan	Imports from other countries
			Japan	Other countries	Total			
Decorated and undecorated								
1932	23,055	16,291	4,935	1,829	6,764	70.7	21.4	7.9
One-half of year total	11,527	8,145	2,468	914	3,382	70.7	21.4	7.9
1933:								
January–June	12,567	8,655	3,111	801	3,912	68.9	24.7	6.4
July–December	16,211	11,330	4,031	850	4,881	69.9	24.9	5.2
1934:								
January–June	14,357	10,107	3,504	747	4,251	70.4	24.4	5.2
July–December	15,497	10,107	4,712	678	5,390	65.2	30.4	4.4
Decorated								
1932	19,129	12,884	4,541	1,704	6,245	67.4	23.7	8.9
One-half of year total	9,565	6,442	2,271	852	3,123	67.4	23.7	8.9
1933:								
January–June	10,188	6,640	2,814	734	3,548	65.2	27.6	7.2
July–December	13,335	8,863	3,705	768	4,473	66.4	27.8	5.8
1934: January–June	11,746	7,943	3,118	685	3,803	67.6	26.6	5.8

The facts above set forth with reference to the ratio of imports of pottery from Japan to the sales of domestic producers should be interpreted in the light of data subsequently presented concerning the trend of prices of Japanese pottery. Partly by reason of a marked advance in the exchange of the Japanese yen resulting from the revaluation of the gold dollar, and partly by reason of repeated advances in 1933 and 1934 in the prices in terms of yen, the landed costs of Japanese pottery rose greatly. Had there been no such increase in landed costs imports would presumably have become much larger.

Decorated pottery by classes

Nature of the domestic and Japanese articles.—Table 16 affords a comparison of the sales by domestic producers of decorated earthenware (semivitreous type) and china (except Belleek) household table and kitchen articles and groups of articles, with imports from Japan of corresponding classes of pottery. It also shows for each period the ratio of imports from Japan to apparent consumption of the domestic and Japanese articles combined (sum of production and imports in the specified period). The figures are significant as a basis for determining both whether the imports are substantial in the several classes and whether they are in increasing ratio to domestic

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production. Data are shown for 2 half-year periods preceding[1] and for 1 period subsequent to the adoption of the code by the domestic industry.

The 1933 and 1934 statistics for imports from Japan include an indeterminable amount of tableware for hotel and restaurant use. It is known, however, that imports of such ware from that country, although they have increased substantially since 1932, still represent a negligible proportion of all imports of Japanese tableware. Their exclusion, accordingly, would not change appreciably the ratios of imports from Japan to apparent consumption.

For most classes of articles mentioned in table 16, the bulk of imports is of china and porcelain, whereas the domestic production is largely of earthenware (semivitreous china). The distinction between these two types of ware has been discussed previously. As a rule, china produced in a given country is considerably more expensive than earthenware produced in the same country, but many Japanese china products sell in the American market at as low a price as domestic earthenware products and compete directly with them.

The group called dinner sets (the domestic production of which is almost wholly earthenware) requires special consideration. Table 15c, supplementing table 16 which gives number of pieces, shows domestic sales and imports from Japan of dinner sets by number of sets.

TABLE 15c.—*Earthenware and china dinner sets, decorated or colored: Sales of domestic and imports from Japan, by number of sets, 1933 and 1934 (6 months)*

	Sales of domestic						Imports from Japan					
	1933, first half		1933, second half		1934, first half		1933, first half		1933, second half		1934, first half	
	Number of sets	Ratio to total	Number of sets	Ratio to total	Number of sets	Ratio to total	Number of sets	Ratio to total	Number of sets	Ratio to total	Number of sets	Ratio to total
		Percent		*Percent*		*Percent*		*Percent*		*Percent*		*Percent*
Dinner sets (total)	883,766	100.0	1,101,436	100.0	791,019	100.0	46,793	100.0	53,092	100.0	73,366	100.0
Not over 31 pieces	280,039	31.7	260,881	23.7	91,047	11.5	------	------	------	------	------	------
32 pieces	378,603	42.8	543,469	49.3	435,252	55.0	11,100	23.7	5,822	11.0	12,939	17.6
33 to 52 pieces	104,195	11.8	118,628	10.8	93,111	11.8	1,856	4.0	2,093	3.9	7,256	9.9
53 to 56 pieces	67,521	7.6	99,036	9.0	97,529	12.3	3,381	7.2	4,140	7.8	2,797	3.8
57 to 62 pieces	10,667	1.2	15,003	1.4	3,169	.4	790	1.7	1,311	2.5	768	1.1
63 to 66 pieces	8,388	.9	9,128	.8	3,484	.4	2,423	5.2	2,477	4.7	3,491	4.8
67 to 92 pieces	696	.1	4,222	.4	8,798	1.1	190	.4	273	.5	649	.9
93 to 96 pieces	15,485	1.8	25,887	2.3	36,043	4.6	21,882	46.8	26,985	50.8	32,952	44.9
97 pieces or more	18,172	2.1	25,182	2.3	22,586	2.9	5,171	11.0	9,991	18.8	12,514	17.0

The bulk of domestic production of decorated dinner sets consists of sets of 56 pieces or under; in the first 6 months of 1934 they represented in number of sets about 91 percent of the total sales of domestic dinner sets. Of dinner sets from Japan, the bulk consists of larger sets, of 93 or more pieces, which in the first 6 months of 1934 were about 62 percent of all dinner sets imported from that country. There is another difference not apparent from the table with respect to decorations of the two types of ware. As a rule, imported china

[1] The code went into effect in December 1933.

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sets are much more elaborately decorated than domestic earthenware sets. Decorations require much skilled hand labor, which is expensive, especially in the United States. Therefore, the designs on domestic earthenware are less elaborate than on imported china.

Dinner sets of less than 32 pieces represent a considerable proportion of all domestic sales of dinner sets; in the first half of 1933 they were (in number of sets) about 32 percent, in the second half of that year about 24 percent, and in the first half of 1934 about 11 percent, of the total. No imports of corresponding earthenware and china sets in these periods were recorded from Japan.

Sales of domestic dinner sets of 32 pieces greatly exceed in quantity and in value those of any other size; for the three periods they were in number of sets 43 percent, 49 percent, and 55 percent, respectively, of the total. Imports from Japan of 32-piece sets (mainly china sets) have been relatively small. In the first 6 months of 1934 they represented in number of sets about 17½ percent of all dinner sets imported from that country; in number of pieces the proportion was, of course, much smaller.

Dinner sets of from 33 to 52 pieces, as well as those of from 53 to 56 pieces, represent a considerable proportion of the sales of domestic sets. In the first half of 1934, each of these groups accounted for about 12 percent of all domestic sets sold. In the same period, sets of these two groups together were about 14 percent of all sets imported from Japan; china sets were about 10 percent of those from 33 to 52 pieces, and about 90 percent of those from 53 to 56 pieces.

Sets of 93 or more pieces were, in number of sets, only about 7½ percent of all sales of domestic sets in the first half of 1934, though, of course, a much larger proportion in terms of number of pieces. In imports from Japan, sets of from 93 to 96 pieces greatly exceed in number of sets those of any other size; in the first 6 months of 1934 they were about 45 percent of all sets imported from Japan; most, if not all, of these were china sets. Sets of 97 pieces or more (mainly 105 piece sets and all of china) are also an important group in imports of dinner sets from Japan, especially as measured by number of pieces; in the first 6 months of 1934 they were, in number of sets, about 17 percent of the total.

For other articles covered by table 16, it should be noted that the terminology of the import trade distinguishes dinnerware sharply from other tableware. The latter is generally designated "short-line tableware", which includes many different kinds of short sets other than dinner sets (such as tea and coffee services), and numerous articles, including teapots, sugars, creamers, cups and saucers, and plates, sold separately and not as parts of sets. For the most part, imported short-line tableware is inferior in quality to imported dinnerware, and the latter includes many articles identically decorated (which may be used in making up dinner sets) that are not obtainable from producers of short-line tableware.

With respect to domestic products, however, dinnerware and short-line tableware are not sharply distinguished. A considerable proportion of the sales of domestic producers consists of cups, saucers, plates, and other articles not sold in sets but so decorated in standard patterns that it is possible for buyers virtually to make up a complete set of the same decoration. Articles sold by the domestic industry under such conditions possibly should be designated short-line table-

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ware, as the term is used by the import trade, but in the import trade articles sold in this manner are generally referred to as "open-stock" dinnerware, as distinguished from short-line tableware.

Both in domestic sales and in imports, cups and saucers (not parts of sets) are the most important articles not sold as parts of complete sets. In the first half of 1934 such cups and saucers were, in number of pieces, about 23 percent of all domestic sales of household table and kitchen articles, and about 24 percent of all imports from Japan.

Plates, all sizes (not parts of sets) are next in importance in sales by domestic producers, constituting about 19 percent of the total in the first half of 1934. On the other hand, plates were only about 5 percent of the imports from Japan in that period.

Tea, coffee, and similar so-called "short sets", preponderantly of china, are one of the most important groups in imports. Japan has for many years been the principal source of United States imports of such articles. The greater proportion by far is tea sets, principally 23 pieces, varying greatly in quality and value; those relatively low in price predominate. Corresponding sets are produced only in relatively small amount by the domestic industry; in table 16 they are included with "other articles".

The domestic articles classified as "other articles" for the most part differ greatly from those so classified which are imported from Japan. As indicated in the analysis of clay-shop production given in table 12, the domestic output consists largely of fruit and cereal dishes, bowls, nappies and bakers, meat platters, small creamers, jugs, mugs, sugars, sauceboats, casseroles, and numerous other articles, most of which are of the kind used in conjunction with dinner and similar services. On the other hand, the imports from Japan consist for the most part of teapots, sugars, creamers, cookie jars, salts and peppers, cruet, condiment and similar sets, beer and other mugs and steins, salad, mayonnaise, berry, and like sets, and include large numbers of many different kinds of bowls, dishes, and other articles, some with relatively expensive decorations, ordinarily designated "fancy ware" by the trade to distinguish them from the usual tableware articles.

With respect to kitchenware, domestic production of earthenware (semivitreous type) increased greatly in the second half of 1933 and the first half of 1934. Imports from Japan (which, unlike the imported table articles, are preponderantly of earthenware), include many articles such as nested bowls, range and refrigerator sets, which are produced in relatively large quantity by the domestic industry. Imports, however, offer a far greater variety in the way of decoration than do the domestic articles. A large proportion of the imported articles have typical Japanese decorations which are preferred by some consumers to other types. It should be noted that this table covers domestic sales of earthenware kitchen articles made in the "semivitreous branch" of the pottery industry only. There is also a larger domestic output of kitchen articles of earthenware made in a different branch of the pottery industry.

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TABLE 16.—*Earthenware and china household table and kitchen articles, decorated or colored, etc.: Summary of sales of domestic and imports from Japan, 1933 and 1934 (6 months)*

	Sales of domestic producers					
	1933 first half	1933 second half	1934 first half	1933 first half	1933 second half	1934 first half
	Quantity (dozen pieces)			Value		
Tableware and kitchenware (total)	6,639,728	8,862,759	7,943,202	$5,590,086	$7,877,743	$8,063,328
Dinner sets (total)	2,579,704	3,414,096	2,681,406	2,075,867	3,030,110	2,841,810
Not over 31 pieces	507,458	519,956	185,066	334,693	355,671	160,433
32 pieces	1,009,608	1,449,250	1,160,672	731,821	1,131,746	1,079,652
33 to 52 pieces	383,140	433,723	335,854	305,111	372,885	329,457
53 to 56 pieces	300,897	441,921	436,589	275,469	476,254	553,959
57 to 62 pieces	53,876	76,525	16,100	47,372	104,378	24,208
63 to 66 pieces	45,485	50,036	18,968	47,510	60,888	27,337
67 to 92 pieces	4,360	25,076	53,314	6,629	35,063	57,260
93 to 96 pieces	121,966	204,621	284,457	136,087	231,312	357,833
97 pieces or more	152,917	212,988	190,386	191,175	261,913	251,641
Other tableware (total)	4,009,921	5,077,336	4,718,024	3,368,793	4,295,614	4,344,013
Cups and saucers, not parts of sets (total)	1,515,495	2,082,181	1,817,510	992,179	1,289,989	1,274,550
Cups and saucers	610,694	1,035,436	875,480	400,976	574,886	586,745
Cups only	513,962	593,460	537,076	417,963	508,586	486,083
Saucers only	390,839	453,285	404,954	173,240	206,517	201,722
Plates	1,288,182	1,518,153	1,555,918	1,099,918	1,417,766	1,500,768
Other articles	1,206,244	1,477,002	1,344,596	1,276,696	1,587,859	1,568,695
Kitchenware	50,103	371,327	543,772	145,426	552,019	877,500

	Imports from Japan					
	1933 first half	1933 second half	1934 first half	1933 first half	1933 second half	1934 first half
	Quantity (dozen pieces)			Value		
Table and kitchenware (total)	2,473,594	3,550,503	2,683,325	$646,443	$1,188,738	$1,246,588
Dinner sets (total)	286,163	361,846	463,321	194,447	345,010	486,936
Not over 31 pieces						
32 pieces	29,600	15,525	34,503	7,488	4,901	10,270
33 to 52 pieces	6,541	7,445	24,980	3,910	7,638	10,681
53 to 56 pieces	15,098	18,463	12,488	10,419	15,624	10,237
57 to 62 pieces	4,024	6,657	3,828	3,877	6,405	5,496
63 to 66 pieces	13,073	13,310	18,634	10,173	13,753	20,819
67 to 92 pieces	1,156	1,736	3,941	950	1,813	5,704
93 to 96 pieces	171,378	211,208	255,141	122,236	203,143	285,316
97 pieces or more	45,293	87,502	109,806	35,394	91,733	138,413
Other tableware (total)	1,807,629	2,803,457	1,911,335	362,006	723,673	647,865
Cups and saucers, not parts of sets (total)	937,710	1,428,222	641,705	111,980	219,453	132,399
Cups and saucers	926,422	1,404,454	633,010	110,418	215,307	130,320
Cups only	10,932	23,506	7,358	1,474	4,055	1,782
Saucers only	356	262	1,337	88	91	297
Plates	54,517	71,102	125,257	28,073	45,388	74,630
Tea, coffee, and other sets [1]	231,200	464,059	364,337	43,297	115,268	114,192
Other articles	584,202	840,074	780,036	178,656	343,564	326,644
Kitchenware	379,802	385,200	308,669	89,990	120,055	111,787

[1] The comparatively small sales of domestic tea, coffee, and similar sets are included in the figures for sales of domestic "other articles" in group 2—Other tableware.

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TABLE 16.—*Earthenware and china household table and kitchen articles, decorated or colored, etc.: Summary of sales of domestic and imports from Japan, 1933 and 1934 (6 months)*—Continued

	Ratio of imports from Japan to consumption of domestic and Japanese tableware and kitchenware [2]					
	1933 first half	1933 second half	1934 first half	1933 first half	1933 second half	1934 first half
	Quantity (percent)			Value (percent)		
Tableware and kitchenware (total)	27.1	28.6	25.3	10.4	13.1	13.4
Dinner sets (total)	10.0	9.6	14.7	8.6	10.2	14.6
Not over 31 pieces						
32 pieces	2.8	1.1	2.9	1.0	.4	.9
33 to 52 pieces	1.7	1.7	6.9	1.3	2.0	3.1
53 to 56 pieces	4.8	4.0	2.8	3.6	3.2	1.8
57 to 62 pieces	6.9	8.0	19.2	7.6	5.8	18.5
63 to 66 pieces	22.3	21.0	49.6	17.6	18.4	43.2
67 to 92 pieces	21.0	6.5	6.9	12.5	4.9	9.1
93 to 96 pieces	58.4	50.8	47.3	47.3	46.8	44.4
97 pieces or more	22.9	29.1	36.6	15.6	25.9	35.5
Other tableware (total)	31.1	35.6	28.8	9.7	14.4	13.0
Cups and saucers, not parts of sets (total)	38.2	40.7	26.1	10.1	14.5	9.4
Cups and saucers	60.3	57.6	42.0	21.6	27.2	18.2
Cups only	2.1	3.8	1.4	.4	.8	.4
Saucers only	(3)	(3)	.3	(3)	(3)	.1
Plates	4.1	4.5	7.4	2.5	3.1	4.7
Tea, coffee, and other sets [1]	100.0	100.0	100.0	100.0	100.0	100.0
Other articles	32.6	36.3	36.7	12.3	17.8	17.2
Kitchenware	88.3	50.9	36.2	38.2	17.9	11.3

[1] The comparatively small sales of domestic tea, coffee, and similar sets are included in the figures for sales of domestic "other articles" in group 2—Other tableware.
[2] Import figures of tableware from other countries than Japan are not included because they are not available in the detail shown here. (See table for these imports in summary form in appendix).
[3] Less than 1/10 of 1 percent.

Comparative recent trends of domestic sales and imports from Japan.—Attention is now directed to the percentages in table 16 showing the share of imports from Japan in the apparent United States consumption of domestic and Japanese household table and kitchen pottery (i. e., the sum of domestic sales and imports in the given period). The significance of these percentages for purposes of the investigation under section 3 (e) lies both in their size for particular items in a given period and in the changes from period to period (the code in the domestic industry having gone into effect near the end of 1933).

For decorated household table and kitchen ware as a whole, the share of imports from Japan in consumption for the first half of 1934 was, as already shown, lower than for either of the two previous half-year periods. For dinner sets, however, the share of imports increased from about 10 percent of consumption for the two periods immediately before the adoption of the code to about 14½ percent in the period after its adoption. This increase resulted chiefly from larger imports of the large size sets, namely from 93 pieces upward, the domestic production of which is much smaller than that of smaller sets. Imports of the small sets are comparatively negligible, although in sets of 33 to 52 pieces the share of imports in consumption rose from 1.7 percent in 1933 to about 7 percent in the first half of 1934.

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In the next general group, "other tableware", where competition in some items is intense, the ratio of imports to consumption declined in the first half of 1934 as compared with both the earlier periods, the figures being 31.1 percent for the first half of 1933, 35.6 percent for the second half, and 28.8 percent for the first half of 1934.

In the group where there is the sharpest competition between imports and domestic production, namely cups and saucers, the ratio of imports to consumption declined sharply, from about 41 percent in the last half of 1933 to about 26 percent in the first half of 1934. Whereas practically all imports of cups and saucers are in pairs, there is a large domestic sale of cups only and saucers only. The effect of price changes in Japan upon imports of cups and saucers has been pointed out (p. 32).

In plates, although the share of imports in consumption increased in the first half of 1934 as compared with the two previous periods, it continued relatively low, plates being one of the most important items of domestic sales but a comparatively small one among imported products.

In the class "tea, coffee, and other sets" the table shows imports as 100 percent of consumption. This is not strictly true because small quantities of these sets are included among domestic sales of "other articles."

Although the ratio of imports to consumption has gone up somewhat for the group "other articles", this figure is not especially significant because, as indicated previously, the articles included in domestic sales and those included in imports are largely dissimilar.

The share of imports in consumption of kitchenware greatly declined in the first half of 1934 as compared with the two previous periods. This was primarily due to the great increase of domestic production of this ware, imports declining only moderately in absolute amount. From 50,000 dozen pieces sold in the first half of 1933, domestic sales increased to about 544,000 dozen pieces in the first half of 1934. Some of the large domestic companies are now specializing in the production of kitchenware products.

Attention has already been called (p. 32) to the influence of price changes in Japan on imports, causing an increase in the second half of 1933 and a decrease in the first half of 1934, a movement which of course affected the ratio of imports to the total apparent consumption. The factor in question was particularly important with respect to cups and saucers.

Table 16 relates to decorated ware only. As already stated, undecorated household table and kitchen pottery is much less important even in quantity than decorated, and the disparity in value is still greater. The undecorated ware represents in number of pieces between one-fifth and one-fourth of total domestic sales and roughly one-tenth of imports from Japan. Because of their minor importance it is unnecessary to make detailed comparisons for individual articles of undecorated ware, as was done in table 16 for decorated ware. A table covering decorated and undecorated articles together, by classes, would show ratios of imports to consumption for most of the items not materially different from those shown in table 16.

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PRICES AND LANDED COSTS OF IMPORTS FROM JAPAN

Yen prices and exchange rates

Japan abandoned the gold standard in December 1931, and the exchange value of the Japanese yen, in terms of dollars, steadily declined, from about 49 cents in November of that year to a low of about 20.5 cents in December 1932. During this period yen prices in Japan for most of the different classes and kinds of pottery table and kitchen articles exported to the United States were increased little, if at all; therefore, in American money the foreign prices, and also the total duty-paid costs to importers, were much lower than in 1931. In the early part of 1933, however, the United States discontinued payments in gold, and the exchange of the yen steadily rose for a number of months thereafter. The average exchange for January–June 1933, was 22.4 cents, for July–December, 28.6 cents, and for the first half of 1934, 30 cents. This rise in exchange greatly affected the dollar prices of pottery imported from Japan. Monthly average exchange rates in recent years have been as follows:

Monthly average rates of exchange for Japanese currency in terms of United States currency, 1931–35

	1931	1932	1933	1934	1935
January	$0.494	$0.360	$0.207	$0.301	$0.285
February	.494	.343	.208	.298	.284
March	.494	.322	.218	.300	----------
April	.494	.328	.221	.303	----------
May	.494	.320	.240	.302	----------
June	.494	.303	.258	.299	----------
July	.494	.274	.288	.298	----------
August	.494	.245	.269	.300	----------
September	.493	.236	.273	.298	----------
October	.493	.231	.278	.287	----------
November	.493	.206	.304	.291	----------
December	.435	.207	.307	.288	----------
Annual average	.488	.281	.256	.297	----------

Source: Federal Reserve Bulletin.

For a considerable time prior to the middle of 1933 the price structure in the Japanese short-line tableware industry had been demoralized, prices for export to the United States, particularly to large buyers, being for the most part largely a matter of bargaining. This period of very low prices continued until the formation (under the provisions of the Export Association Law of Japan) of the Federation of Japan Pottery Exporters' Associations. This federation has the power to control the volume of and to fix minimum prices for all pottery exported to any part of the world. Minimum prices for export to the United States were first fixed for eight items (for the most part cups and saucers, including those sold separately or as parts of sets), effective November 1, 1933; prices for the cheaper cups and saucers especially were raised considerably. The federation further increased the minimum yen prices for cups and saucers as of January 1, 1934, and still another increase was made on November 1, 1934. The extent of these two later increases is indicated by figures of minimum prices for decorated earthenware and china ovide tea cups and saucers (including cases and packing), which were fixed at 73 sen (per dozen cups and saucers) as of November 1, 1933, at 1 yen as of January 1, 1934, and at 1.25 yen as of November 1, 1934.

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In 1934 minimum prices were also fixed by the federation for 22 articles decorated overglaze, and for 22 articles decorated underglaze. These consisted of teapots and plates of different sizes, sugar and creamer sets, 17-piece coffee sets, 17-piece and 23-piece tea sets, and specific salad bowls, fruit and oatmeal saucers. The federation also fixed minimum rates for charges to port of exportation and for purchasing commission.

The policy of Japanese exporters in thus markedly raising yen prices, at the same time that yen exchange was much higher than theretofore, was no doubt due chiefly to the desire to increase their margin of profit, a liberal margin on a considerable volume of sales bringing a larger net return than a very narrow margin even on a decidedly bigger volume. This attitude may have been strengthened by the desire to avoid possible action by the United States Goverment in restricting imports. During the period of excessive depreciation of the yen in 1932 and the early months of 1933, while yen prices of pottery were still very low, the landed costs, duty paid, of Japanese articles in the United States had been much below the domestic cost of production, and this situation had caused much complaint in the domestic industry.

Increase in average unit value of imports from Japan

For all decorated household table and kitchen pottery imported from Japan, the average foreign unit value (obtained simply by dividing the total number of pieces into the total value shown in table 9) was about 26 cents per dozen pieces during the first half of 1933, 33½ cents during the second half, and 46½ cents in the first half of 1934. Part of this sharp advance was due to an increase of the proportion of articles of the higher-priced groups in the total imports. However, for the separate classes of articles the percentage figures of table 9 show the increase in values in practically every case much greater than those in quantity, indicating higher average unit values. In the case of some of the classes the increase in average unit values may not have been due wholly to advance in prices, but may have resulted from an increase in the proportion of high-priced articles as compared with lower-priced articles within the class. However, the more detailed data of landed costs of identical articles, obtained by the Commission and presented below, indicate that the greater part of the advance in average unit values was due to higher yen prices and advance in the exchange of the yen. Increase in the foreign values of Japanese pottery of course increases by the same proportion the amount of duty collected under the ad valorem rate, but carries no increase in that part of the duty which is specific.

Changes in landed costs of representative Japanese articles

In order to determine the average percentage of change in the foreign prices and the landed costs of imported Japanese pottery, the Commission obtained from a number of importers the actual prices paid by them for representative articles, the transportation costs and charges on these articles from the producing plant in Japan to New York City, and the amount of duty. The prices paid in Japan for the pottery and the cost of transportation to Japanese ports were, of course, in Japanese currency and they were converted to United States currency at the average rate of exchange for the month in which the given shipment was made. Ocean freight from Japanese ports via

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Panama Canal to New York City was computed at the rate of $8 per ton (of 40 cubic feet), this rate remaining constant throughout 1933 and 1934. Other costs incurred, aside from duty, consist of consular fees, and handling charges at New York City. These data were secured for a considerable number of importers and of individual articles, identical throughout the periods compared, and they are believed to be representative. The data have been combined into weighted averages by a method which eliminates the effect of any change in the relative importance of articles of different grade and value in the imports.[1]

Table 17 summarizes by means of relative numbers these landed cost data for imports from Japan. It will be seen that for all articles of decorated china covered, the average percentage of increase in landed cost between the first half of 1933 and the second half was 31.7 percent, and the average percentage of increase for the first half of 1934 over the second half of 1933 was 10.5 percent. On the average, therefore, the landed costs of the china articles for the first half of 1934 exceeded those for the first half of 1933 by 45.5 percent. There was a further slight increase in landed costs during the second half of 1934 (data for some of the items were not available for this period).

Some difference in movement of costs appears as between the groups distinguished in the table but in each of them there was a marked increase from the first to the second half of 1933 and a further increase for the first half of 1934.

Tables 18 and 18a show in detail the landed costs of the individual items entering into this computation, together with relative numbers indicating the percentages of change.

TABLE 17.—*Landed costs of decorated household table articles imported from Japan—relative numbers based on landed costs of representative identical articles*

	Relative number based on January–June 1933 as 100			Relative number based on July–December 1933, as 100		
	Second half 1933	First half 1934	Second half 1934	First half 1933	First half 1934	Second half 1934
Decorated earthernware:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Cups and saucers (short-line)	117.6	126.8	131.2	85.0	107.8	111.5
Other tableware	119.8	129.6	128.3	83.4	108.2	107.1
Average	119.4	129.1	128.8	83.7	108.1	107.9
Decorated china:						
Cups and saucers (short-line)	121.5	134.7	136.9	82.4	111.0	112.8
Plates (short-line)	126.3	149.0	153.0	79.2	118.0	121.1
32-piece sets	134.1	149.6	153.1	74.7	111.6	114.3
53-piece sets	134.1	149.7	153.2	74.7	111.7	114.3
Average above items	121.7	135.0	137.2	82.3	111.1	112.9
93-piece sets	149.0	163.4	----------	67.1	109.7	----------
94-piece sets	148.0	173.0	----------	67.7	116.9	----------
Other tableware	125.4	135.7	138.9	79.9	108.1	110.7
Average all items	131.7	145.5	----------	76.7	110.5	----------

[1] The method of averaging was as follows: (1) Considering each selected article separately, the percentage relationship, as between any two periods, of the total cost, including duty, at New York City for each importing company was weighted by the total quantity of the imports of that article by that company in the 18-month period (Jan. 1, 1933, to June 30, 1934), to arrive at the average percentage relationship for that article for all companies combined; (2) the average percentage relationship as between any two periods for two or more articles or groups of articles combined was arrived at by weighting the average percentage relationship of each article or group, computed as above, by the total landed cost, including duty, at New York City for the imports of that article by all of the selected companies in the 18-month period (Jan. 1, 1933, to June 30, 1934).

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TABLE 18.—*Landed costs of decorated household table articles imported from Japan, 1933 and 1934*

Item no.	Item	Unit of quantity	Imports in 18-month period, Jan. 1, 1933–June 30, 1934		Unit cost, including duty				Relative numbers on basis of January–June 1933 as 100			Relative numbers on basis of July–December 1933 as 100		
			Quantity	Total landed cost	January–June 1933	July–December 1933	January–June 1934	July–December 1934	July–December 1933	January–June 1934	July–December 1934	January–June 1933	January–June 1934	July–December 1934
									Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
1	Decorated china: Cups and saucers (short-line)	Dozen pairs	49,423		$0.638	$0.759	$0.841	$0.871	119.0	131.9	136.7	84.0	110.8	114.9
2					.598	.747	.835	.865						
3			48,071		.642	.781	.923	.934	123.3	141.5	145.1	81.2	114.9	117.7
4					.631	.777	.841	.871						
5			98,186		.740	.912	1.001	1.002	123.1	134.2	136.7	81.2	109.0	111.1
6			24,188		.582	.664	.841	.871	114.2	144.5	149.8	87.6	126.6	131.2
7					1.213	1.508	1.614	1.630						
8			254,308		.899	1.088	1.154	1.161	122.6	130.7	131.8	81.6	106.6	107.4
9					1.123	1.393	1.492	1.510						
10					.899	1.088	1.154	1.161						
11					.493	.589	.829	.859						
12			48,071		.657	.757	.910	.922	117.4	153.2	157.2	85.3	130.4	133.8
13			23,397		.498	.595	.619	.610	119.5	124.3	122.6	83.7	104.0	102.6
	Total and average for cups and saucers			$517,542					121.5	134.7	136.9	82.4	111.0	112.8
14	Plates (short-line)	Dozen		5,075	.711	.898	1.059	1.087	126.3	149.0	153.0	79.2	118.0	121.1
	Dinner sets:													
15	32-piece	Set			6.344	8.772	9.827	10.061						
16	Do.				3.830	5.020	5.598	5.731						
17	Do.			3,066	4.525	6.188	6.893	7.040	134.1	149.6	153.1	74.7	111.6	114.3
18	Do.				3.094	4.024	4.486	4.599						
19	53-piece	do			11.196	15.484	17.340	17.752						
20	Do.				5.393	7.010	7.841	8.010						
21	Do.			2,214	7.865	10.765	12.004	12.261	134.1	149.7	153.2	74.7	111.7	114.3
22	Do.				6.702	8.788	9.807	10.041						
	Average for all preceding items								121.7	135.0	137.2	82.3	111.1	112.9

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	Dinner sets:														
23	93-piece	Set		320,908	12,161	18.143	19.921		149.0	163.4		67.1	109.7	
24	Do				10.562	15.485	16.965							
25	Do				15.402	23.267	25.558							
26	94-piece				7.979	12.700	14.808							
27	Do				10.227	15.094	18.129							
28	Do				11.540	16.636	19.150							
29	Do			103,375	12.200	17.709	19.993		148.0	173.0		67.7	116.9	
30	Do				12.539	18.117	20.836							
31	Do				13.006	18.825	21.664							
32	Do				13.548	19.767	23.012							
33	Do				14.334	21.829	27.048							
	Average for all preceding items								133.7	148.7		75.6	111.2	
	Other tableware (for details see table 18a)								125.4	135.7	138.9	79.9	108.1	110.7
	Average for all china items								131.7	145.5		76.7	110.5	
	Decorated earthenware:													
49	Cups and saucers	Dozen pairs		11.365	.625	.735	.792	.820	117.6	126.8	131.2	85.0	107.8	111.5
	Other tableware (for details see table 18a)								119.8	129.6	128.3	83.4	108.2	107.1
	Average, all earthenware items								119.4	129.1	128.8	83.7	108.1	107.9

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TABLE 18a.—*Landed costs of decorated household table articles imported from Japan: Details of costs of "other tableware" summarized in table 18*

Item no.	Item	Unit of quantity	Imports in 18-month period, Jan. 1, 1933–June 30, 1934		Unit cost, including duty				Relative numbers on basis of January–June 1933 as 100			Relative numbers on basis of July–December 1933 as 100		
			Quantity	Total landed cost	1933, January–June	1933, July–December	1934, January–June	1934, July–December	1933, July–December	1934, January–June	1934, July–December	1933, January–June	1934, January–June	1934, July–December
	Details of "other tableware" of china:								*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
34			3,575		$0.865	$1.020	$1.090	$1.091	117.9	126.0	126.2	84.8	106.9	107.0
35			53,481		.761	.952	1.023	1.064	125.0	134.3	139.7	80.0	107.4	111.7
36			7,728		.871	.956	1.134	1.117	113.1	129.8	136.3	88.5	114.9	120.4
37	Tea sets, 23-piece	Set			.567	.660	.733	.819						
38					.990	1.164	1.221	1.245						
39			57,380		4.296	5.799	6.360	6.240	127.5	137.5	136.8	78.7	107.7	107.2
40					1.986	2.584	2.806	2.766						
	Total and average of percentages			$233.924					125.2	135.3	137.7	80.1	108.0	110.0
41	Tea sets, 29-piece	Set		19,452	1.719	2.178	2.348	2.392	126.7	136.6	139.1	78.9	107.8	109.8
42	Teapots, 3-cup	Dozen		1,536	.956	1.147	1.307	1.473	120.0	136.8	154.1	83.3	113.9	128.4
43	Teapots, 5-cup	do	9,710		1.579	1.899	2.027	2.074	120.3	128.4	131.4	83.1	106.7	109.2
44			7,575		1.649	2.072	2.235	2.322	125.7	135.6	140.8	79.6	107.9	112.1
	Total and average of percentages			32,255					122.7	131.6	135.5	81.6	107.2	110.5
45	Sugars and creamers	Dozen pairs		2,639	1.465	1.787	1.962	2.088	122.0	134.0	142.6	81.9	109.8	116.8
46	Salad bowls	Dozen		4,297	.853	1.011	1.139	1.283	118.6	133.6	150.5	84.3	112.6	126.9
47	Bonbon dishes	do		2,850	.570	.673	.725	.734	118.2	127.2	128.8	84.6	107.6	109.0
48	Cookie jars	do		17,752	4.081	5.548	6.114	6.410	135.9	149.8	157.1	73.6	110.2	115.6
	Average of percentages (other tableware)								125.4	135.7	138.9	79.9	108.1	110.7
	Details of "other tableware" of earthenware:													
50	Teapots, 3-cup	Dozen		4,062	.802	.943	.999	1.000	117.7	124.6	124.7	85.0	105.9	106.0
51	Teapots, 5-cup	do		25,137	1.744	2.096	2.249	2.215	120.2	128.9	127.0	83.2	107.3	105.7
52	Sugars and creamers	Dozen pairs		787	1.203	1.457	1.601	1.615	121.1	133.1	134.3	82.6	109.9	110.9
53	Cookie jars	Dozen		10,618	1.531	1.835	2.006	1.976	119.8	131.0	129.0	83.4	109.3	107.6
54	Salad bowls	do		1,687	1.046	1.276	1.363	1.364	122.0	130.3	130.3	82.0	106.8	106.8
55	Cake plates and servers	do		2,726	2.122	2.512	2.905	2.907	118.4	136.9	137.0	84.4	115.6	115.7
56	Waffle sets, 5-piece	Dozen sets		1,132	3.552	4.233	4.619	4.767	119.2	130.0	134.2	83.9	109.1	112.6
	Average (other tableware)								119.8	129.6	128.3	83.4	108.2	107.1

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In addition to the data based on prices of identical articles presented in tables 18 and 18a, the Commission secured from the importers average landed costs of all articles of each class (such as cups, saucers, plates, teapots, etc.) imported by them, respectively, during the three periods under consideration (first and second halves of 1933 and the first half of 1934). These averages for the several periods are not strictly comparable because of changes in the character of the articles in the given class. They are therefore a less trustworthy indication of the true price and cost changes than the data in the preceding tables. Nevertheless, they tend to confirm the conclusions. Table 19 presents relative numbers showing the changes in landed costs computed in this manner. The more detailed data are presented in the appendix.

TABLE 19.—*Landed costs of decorated household table articles imported from Japan—relative numbers based on average costs to each importer of all articles of the specified class imported*

	Relative numbers based on January-June 1933 as 100		Relative numbers based on July-December 1933 as 100	
	Second half 1933	First half 1934	First half 1933	First half 1934
Decorated earthenware:	*Percent*	*Percent*	*Percent*	*Percent*
Cups and saucers (short-line)	117.9	124.2	84.8	105.3
Plates (short-line)	153.6	151.1	65.1	98.4
Average	126.1	138.7	79.7	101.6
Other tableware	124.3	145.4	80.1	117.1
Average-decorated earthenware	124.7	142.9	80.0	111.4
Decorated china:				
Cups and saucers (short-line)	118.9	149.4	84.1	125.7
Plates (short-line)	119.0	130.0	84.0	109.2
32-piece dinner sets	149.4	210.2	66.9	140.7
54-piece dinner sets	114.2	147.7	87.6	129.3
66-piece dinner sets	129.5	124.8	77.2	96.3
94-piece dinner sets	127.2	149.1	78.6	117.2
105-piece dinner sets	132.0	150.5	75.8	114.0
Average	123.5	148.7	81.6	117.4
Other tableware	132.5	123.5	79.4	92.6
Average-decorated china	125.6	142.1	81.0	110.8

DOMESTIC COSTS OF PRODUCTION OF REPRESENTATIVE ARTICLES

Scope and methods of the cost inquiry

In cooperation with representatives of the domestic pottery industry, the Commission selected 15 pottery plants for the study of detailed costs of production, with special reference to changes between the half-year period immediately before and immediately after the adoption of the code, which went into effect in December 1933.

Cost data were obtained from 12 plants making earthenware (semivitreous china) and from three making china. Three of those producing earthenware manufacture in addition to their dinnerware a line of ovenware, some items of which were covered in the cost study. From two of the three plants producing china, costs were

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obtained for domestic dinnerware (in contrast to hotel ware), and from the other costs of china teapots, kitchenware, and ovenware.

The code provided that the code authority should introduce adequate cost-accounting systems for each branch of the industry. Such a cost system has been devised and is in operation in most of the plants covered by the present investigation, under the supervision of a certified public accountant. The Commission has used the same cost methods as thus adopted under the code, with such variations as were found necessary for the particular purposes of the inquiry. The cost information obtained by the Commission is therefore as reliable as the information on the records of the individual companies.

It should be borne in mind, however, that in the production of hundreds of different kinds and shapes of pottery, all fired simultaneously in the same kiln, some of the elements of cost per piece are necessarily estimates based upon somewhat conventional units, such as the cost per pound for raw material used in the clay shop, and the cost per cubic foot for kiln firing. There are many overhead and indirect expenses also, which must be distributed to individual kinds of products by more or less conventional systems of cost accounting. The unit cost of any item of pottery cannot in the nature of things be as accurate as the unit cost of a homogeneous product, such as pig iron, plate glass, or copper.

For the purpose of showing the change in costs between the two periods under consideration, however, the data obtained are believed to be reliable, because the same methods of calculating costs were used in both periods.

The nature of the processes and products, and the character of the records of costs make it impracticable to ascertain for any given finished article the several factors in cost, such as labor, materials, and overhead expenses. Only total cost can be determined without excessive expenditure of time and money.

For most of the items for which costs were computed, detailed data were available for only two periods at the time the field work was done, namely, for the last half of 1933 and the first half of 1934. Cost data were available, however, for white ware (before decoration) for the first 6 months of 1933 in the case of most of the companies, and some costs for the decorated ware were also available for that period.

Cost data were obtained from 12 companies producing earthenware and 2 producing china dinnerware for a large number of items, including several sizes of plates, several kinds of cups and saucers, and the numerous articles used in making up 94-piece or smaller dinner sets. Many decorations were also covered for a number of these items. In the final cost summary, however, it is not practicable to show all costs obtained. The summary data for the 14 companies, therefore, are limited to footed cups, footed cups and saucers, 7-inch plates, 32-piece sets, and 94-piece sets. It was found that the costs for these articles were representative of the costs for the much larger variety of types and sizes covered by the investigation.

Costs were obtained for each article first as white ware, not decorated, and second in a variety of decorations. Those for white ware cover all expenses necessary to complete the product ready for decoration, including both body and glaze firing. Some "white ware" is sold without decoration, and may have a colored glaze.

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Inasmuch as cost data for china dinnerware were obtained from only two companies, costs of china cannot be shown without revealing confidential information. Percentage changes can be shown, however, for the first half of 1934 as compared with the last half of 1933. These percentages are given in table 21.

Costs of decorated ware were calculated on two bases: (1) Certain articles having a specific decoration such as "one spray, no line" were selected and costs of production of these articles by all the companies making them were ascertained, and these costs combined into weighted averages. (2) For each company there were selected articles having decorations which that company considered most representative of its business. Because of variations among the several companies with respect to shapes and degree of elaboration of the decoration of these representative articles, it was obviously impracticable to combine them into general averages, in terms of absolute cost figures. Instead, the percentage of change in the cost of the representative decorations as between the last half of 1933 and the first half of 1934 was calculated, and these percentages of change for the several companies were combined into general averages. The two methods show substantially the same results as regards the percentage of increase in costs between the two periods.

Unit costs in second half of 1933 and first half of 1934

Table 20 summarizes for the half year preceding and the half year following the adoption of the code the unit costs of earthenware obtained by the methods outlined above. In making the averages for any given article for all companies combined the cost for each company has been weighted by its total sales of all pottery, unpacked, whether plain or decorated.

The first section of the table is devoted to the cost of white ware before decoration. It will be observed that these costs for the several kinds of tableware increased on the average by from 14 to 16 percent in the first half of 1934 as compared with the second half of 1933.

The next section of the table shows unit costs of ware with a "one spray, no line" decoration. These costs were obtained by adding the cost of decorating to the cost of the white ware and allowing for loss of goods in the decorating processes. For this particular decoration costs increased from 12 to 15 percent for different items in the first half of 1934 as compared with the previous 6-month period. Costs for the two other specific decorations listed show percentage increases somewhat smaller.

The last section of the table is devoted to the percentages of change between the last half of 1933 and the first half of 1934 in the costs of the representative decorations of the several companies. The average of these percentages for the large and small companies combined in each of the five classes of articles distinguished conforms almost precisely with the figures for the articles decorated with "three spray, line" and "semiborder."

Table 20 also distinguishes the costs of the large and medium-sized companies from those of the small companies. It shows:

1. That unit costs of the small companies are much higher than those of the large and medium sized companies, but

2. That the percentage increase in costs in the first half of 1934 as compared with the second half of 1933 was much less for the small companies than for the other companies.

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TABLE 20.—*Earthenware household tableware: Trend of domestic costs for the periods immediately before and after the adoption of the code of fair competition in December 1933*

	Number of companies	Footed cups			Footed cups and saucers			7-inch plates			32-piece sets			94-piece sets		
		Cost per dozen		Ratio 1934 to 1933	Cost per dozen		Ratio 1934 to 1933	Cost per dozen		Ratio 1934 to 1933	Cost per set		Ratio 1934 to 1933	Cost per set		Ratio 1934 to 1933
		Second half 1933	First half 1934		Second half 1933	First half 1934		Second half 1933	First half 1934		Second half 1933	First half 1934		Second half 1933	First half 1934	
White ware before decoration: [1]				*Percent*			*Percent*			*Percent*			*Percent*			*Percent*
Large and medium companies	6	$0.443	$0.523	118	$0.721	$0.839	116	$0.564	$0.655	116	$1.097	$1.274	116	$4.190	$4.957	118
Small companies	6	.626	.683	109	.970	1.045	108	.794	.803	101	1.473	1.549	105	5.630	5.934	105
All companies	12	.475	.551	116	.764	.874	114	.603	.681	113	1.162	1.321	114	4.482	5.156	115
Decorated ware:																
One spray, no line:																
Large and medium companies	6	.604	.703	116	1.035	1.190	115	.738	.850	115	1.527	1.753	115	5.536	6.441	116
Small companies	4	.861	.919	107	1.414	1.486	105	1.056	1.047	99	2.073	2.131	103	7.420	7.683	104
All companies	10	.635	.729	115	1.082	1.226	113	.777	.874	112	1.594	1.799	113	5.810	6.622	114
Three-spray line:																
Large and medium companies	5	.802	.915	114	1.422	1.600	113	.932	1.056	113	2.043	2.301	113	7.501	8.551	114
Small companies	3	1.168	1.196	102	1.972	1.998	101	1.268	1.261	99	2.745	2.751	100	9.431	9.465	100
All companies	8	.841	9.45	112	1.480	1.642	111	.968	1.078	111	2.118	2.348	111	7.755	8.671	112
Semiborder:																
Large and medium companies	6	.950	1.097	115	1.702	1.916	113	1.067	1.197	112	2.401	2.690	112	8.649	9.869	114
Small companies	4	1.299	1.351	104	2.230	2.303	103	1.389	1.413	102	3.121	3.197	102	10.540	10.810	103
All companies	10	.987	1.124	114	1.759	1.957	111	1.101	1.221	111	2.479	2.745	111	8.895	9.991	112
Representative decorations: [2]																
Large and medium companies	6	-------	-------	114	-------	-------	112	-------	-------	113	-------	-------	113	-------	-------	113
Small companies	5	-------	-------	107	-------	-------	106	-------	-------	104	-------	-------	105	-------	-------	105
All companies	11	.892	1.000	112	1.568	1.740	111	1.014	1.123	111	2.221	2.467	111	7.646	8.547	112

[1] The Commission also obtained the cost of producing white ware for the first half of 1933. These costs were substantially the same as for the first half of 1934 and therefore higher than the second half of 1933. Average costs for all companies were as follows: Footed cups, $0.532 per dozen; footed cups and saucers, $0.856; 7-inch plates, $0.669; 32-piece sets, $1.290; and 94-piece sets, $5.065.

[2] Average unit costs for "representative decorations" are not as significant as the average costs for white ware or for specific decorations, because of the variety of the designs among the various companies; therefore unit costs by classes of companies are not shown.

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Unit costs by companies

In table 20 the unit costs of various items of earthenware were shown for two groups of companies. It is of some importance to know these unit costs by individual companies and the variations among companies with respect to changes in costs between the two periods under comparison. These data are given in table 20a. Inasmuch as production figures indicating the approximate size of company are not given, there is no means of identifying the costs of individual companies in this table. There is no significance, of course, in the order of company numbers. The absolute data for the company having the lowest unit costs are omitted, only the percentage changes being shown.

Although there are considerable variations in unit costs among the companies, these variations are no more than would be expected when the different operating conditions, equipment, and sizes of companies are taken into consideration. It is not to be inferred that the lowest costs are all those of the largest companies. Some comparatively small companies concentrate on a limited number of items, and as a result obtain relatively low costs of production. In other cases the size of the productive equipment, e. g., number or size of tunnel kilns, of one company may be more closely related to its market demand than the equipment of another to its market. As a result, lower costs are obtained by the better production-sales adjustment.

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TABLE 20a.—*Earthenware household tableware: Trend of domestic costs, by companies, for the periods immediately before and after the adoption of the code of fair competition in December 1933*

	Footed cups			Footed cups and saucers			7-inch plates			32-piece sets			94-piece sets		
	Cost per dozen		Ratio of 1934 to 1933	Cost per dozen		Ratio of 1934 to 1933	Cost per dozen		Ratio of 1934 to 1933	Cost per set		Ratio of 1934 to 1933	Cost per set		Ratio of 1934 to 1933
	Second half 1933	First half 1934		Second half 1933	First half 1934		Second half 1933	First half 1934		Second half 1933	First half 1934		Second half 1933	First half 1934	
White ware (before decoration):															
Company no.—			*Percent*			*Percent*			*Percent*			*Percent*			*Percent*
1	$0.453	$0.549	121	$0.774	$0.893	115	$0.652	$0.727	112	$1.242	$1.392	112	$4.735	$5.410	114
2	.654	.723	111	1.054	1.169	111	.835	.914	109	1.603	1.790	112	6.067	6.687	110
3 [1]			109			107			108			107			
4	.493	.584	118	.759	.888	117	.551	.641	116	1.068	1.243	116	3.945	4.594	116
5	.436	.472	108	.701	.764	109	.528	.606	115	1.065	1.181	111	3.927	4.438	113
6	.407	.531	130	.637	.819	129	.495	.628	127	.972	1.242	128	3.686	4.679	127
7	.611	.597	98	.910	.888	98	.723	.688	95	1.328	1.279	96	5.071	4.827	95
8	.695	.766	110	1.110	1.186	107	.843	.879	104	1.655	1.728	104	6.056	6.473	107
9	.824	.865	105	1.261	1.308	104	.955	.960	101	1.832	1.868	102	7.107	7.250	102
10	.514	.694	135	.799	1.059	133	.879	.897	102	1.363	1.646	121	5.202	6.332	122
11	.698	.814	117	1.040	1.214	117	.739	.868	117	1.530	1.787	117	5.950	6.977	117
12	.548	.561	102	.880	.891	101	.703	.692	98	1.362	1.361	100	5.295	5.259	99
Weighted average	.475	.551	111	.764	.874	116	.603	.681	114	1.162	1.321	115	4.482	5.156	116
Decorated ware:															
One spray no line:															
Company no.—															
1	.629	.744	118	1.124	1.277	114	.832	.925	111	1.712	1.906	111	6.135	6.947	113
2	.842	.929	110	1.425	1.571	110	1.031	1.130	110	2.103	2.335	111	7.595	8.365	110
3 [1]			111			110			111			110			
4	.654	.749	115	1.077	1.212	113	.713	.807	113	1.494	1.678	112	5.205	5.887	113
5	.639	.754	118	1.104	1.324	120	.732	.890	122	1.605	1.928	120	5.818	6.659	121
6	.559	.677	121	.936	1.109	118	.649	.776	120	1.370	1.628	119	4.877	5.837	120
7	.814	.817	100	1.301	1.316	101	.931	.912	98	1.856	1.854	100	6.679	6.562	98
8	.893	.934	105	1.501	1.517	101	1.046	1.050	100	2.179	2.170	100	7.619	7.803	102
9	1.136	1.149	101	1.868	1.868	100	1.274	1.245	98	2.644	2.614	99	9.583	9.482	99
10	.694	.868	125	1.154	1.400	121	1.066	1.075	101	1.841	2.102	114	6.627	7.707	116
11															
12		.736			1.238			.870			1.826			6.650	
Weighted average	.635	.729	107	1.082	1.226	113	.777	.874	112	1.594	1.799	113	5.810	6.622	114

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Three-spray and line:															
Company no.—															
1	.812	.939	116	1.489	1.672	112	1.015	1.121	110	2.198	2.431	111	7.568	8.493	112
2	1.257	1.350	107	2.252	2.409	107	1.446	1.551	107	3.202	3.452	108	10.832	11.654	108
3 [1]			111			110			111			110			
4															
5	.877	.962	110	1.519	1.678	110	.906	1.036	114	2.102	2.349	112	7.067	7.966	113
6	.789	.960	120	1.399	1.644	118	.872	1.031	118	1.997	2.319	117	6.681	7.911	118
7	1.057	1.084	103	1.735	1.783	103	1.115	1.110	100	2.377	2.415	102	8.193	8.199	100
8	1.122	1.164	104	1.935	1.952	101	1.251	1.258	101	2.738	2.731	100	9.269	9.458	102
9	1.422	1.435	101	2.439	2.438	100	1.559	1.532	98	3.405	3.372	99	11.824	11.714	99
10															
11															
12		.964			1.695			1.098			2.433			8.439	
Weighted average	.841	.945	112	1.480	1.642	111	.968	1.078	111	2.118	2.348	111	7.755	8.671	112
Semiborder:															
Company no.—															
1	.912	1.041	114	1.688	1.872	111	1.115	1.223	110	2.462	2.697	110	8.348	9.277	111
2	1.028	1.117	109	1.791	1.746	109	1.216	1.318	108	2.593	2.835	109	9.028	9.830	109
3 [1]			112			110			111			110			
4	.812	.926	114	1.391	1.567	113	.871	.984	113	1.909	2.145	112	6.441	7.266	113
5	1.003	1.139	114	1.792	1.933	108	1.055	1.114	106	2.481	2.605	105	8.213	9.069	110
6	1.213	1.452	120	2.198	2.557	116	1.258	1.471	117	3.015	3.517	117	9.750	11.524	118
7	1.126	1.155	103	1.867	1.925	103	1.182	1.181	100	2.556	2.602	102	8.727	8.756	100
8	1.306	1.348	103	2.300	2.319	101	1.435	1.439	100	3.226	3.218	100	10.705	10.893	102
9	1.379	1.391	101	2.354	2.352	100	1.516	1.488	98	3.292	3.259	99	11.493	11.376	99
10															
11	1.602	1.783	111	2.830	3.143	111	1.645	1.838	112	4.094	4.546	111	13.402	14.956	112
12		1.075			1.740			1.209			2.726			9.298	
Weighted average	.987	1.124	114	1.759	1.957	111	1.101	1.221	111	2.479	2.745	111	8.895	9.991	112
Representative decorations: [2]															
Company no.—															
1			115			112			110			110			112
2			112			115			111			112			112
3			111			110			111			110			111
4			113			112			112			112			112
5			105			104			108			105			107
6			120			118			118			120			121
7			105			106			108			105			103
8			104			101			101			101			103
9			100			99			98			99			99
10			115			112			100			112			110
11			112			111			113			111			110
12															
Average			112			111			111			111			112

[1] Unit costs for company 3 are not shown because of the possibility of disclosing the operations of an individual company. They are, however, included in the respective averages.

[2] Unit costs by companies are not given for "representative decorations", because they overemphasize the variations in costs among the companies on account of the different degrees of elaboration in the decorations used by the various companies.

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COMPARATIVE CHANGES IN DOMESTIC COSTS AND IN LANDED COSTS OF IMPORTED ARTICLES

Changes in the landed costs of representative items of Japanese tableware and in the domestic costs of production of representative items have been summarized in previous sections. (See tables 17 and 20.) Domestic costs, except for white ware, relate only to the second half of 1933 and the first half of 1934, but the costs for the Japanese pottery cover (except as to a few items for which data for the second half of 1934 were not ascertained) each half year of 1933 and 1934. Costs were obtained for a more limited list of domestic than of imported articles, but the percentage changes in the costs for the domestic items covered may be considered fairly representative of the changes for all domestic articles.

Table 21 compares the changes between the second half of 1933 and the first half of 1934 in the domestic costs of production with the changes between these periods in the landed costs of Japanese pottery. It will be remembered that the great bulk of the domestic production consists of earthenware and that the great bulk of imports consists of china; landed costs were ascertained for only two classes of Japanese earthenware, in both of which the imports of such ware were much smaller than those of china. It will be seen from this table that for cups and saucers and for dinner sets the increase in the landed costs of Japanese decorated chinaware was substantially the same as the increase in domestic costs of production of decorated earthenware. For plates, the increase in landed costs was considerably greater than that in domestic costs of production, a circumstance perhaps due to the fact that the imports of plates are small and that there was not a broad basis for average landed costs. The average increase in domestic costs for white earthenware was 15 percent, for decorated earthenware 12 percent, and for the much less important decorated china, 10 percent. The average increase in the landed costs of the corresponding classes of Japanese decorated china (the dominant class) was 14.4 percent, and the average increase for all the decorated china for which data were secured, including "other" tableware for which domestic costs were not ascertained, it was 10.7 percent. Landed costs were not obtained for Japanese undecorated (i. e., white) ware, imports of which are of minor importance.

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TABLE 21.—*Costs of production of domestic pottery and landed costs of Japanese pottery: Ratio of costs for the first half of 1934 to costs for the second half of 1933*

	Ratio of costs in first half of 1934 to costs in second half of 1933, percent				
	Domestic costs of production of—			Landed costs of Japanese—	
	White earthenware (undecorated)	Decorated earthenware	Decorated china	Decorated earthenware	Decorated china
Cups and saucers	116	112	109	107.8	111.0
Plates	114	111	109	----------	118.0
32-piece sets	114	112	110	----------	111.6
94-piece sets	116	113	110	----------	116.9
Average for 4 items	115	112	110	----------	114.4
53-piece sets [1]	----------	----------	----------	----------	111.7
93-piece sets [1]	----------	----------	----------	----------	109.7
"Other" tableware	----------	----------	----------	108.2	108.1
Average for 3 items	----------	----------	----------	----------	110.7
General average	----------	----------	----------	110.4	

[1] The domestic costs for sets of these sizes were not computed, but would necessarily show substantially the same percentage changes between the 2 periods as were shown for 32-piece and 94-piece sets.

Table 21a shows relative numbers for domestic costs and landed costs of Japanese articles taking the first half of 1933 as 100. There is little significance in the comparison between the domestic data, which relate only to white earthenware, and the data for Japanese articles, which relate to decorated ware. The main point of this table lies in the fact that the Japanese landed costs had already increased greatly in the second half of 1933 as compared with the first half, whereas both the data for actual costs of representative items of white ware obtained from domestic producers, and the general operating accounts of the domestic producers indicated some reduction in unit costs between the first and second halves of 1933, primarily as the result of much larger volume of output.

The Commission obtained no data concerning domestic costs of production in the second half of 1934. There were no significant changes in wage rates in that period and it is probable that total costs per unit were substantially the same as in the first half of the year. Table 21a shows that the landed costs of Japanese decorated china were a little higher in the last half than in the first half of the year. It should be noted that as of November 1, 1934, a considerable advance in yen prices of cups and saucers (including those making up parts of sets) went into effect so that the average landed cost, for all Japanese articles of pottery taken together, reaching this country after about December 1 was appreciably higher than before. More than nine tenths of the imports of the second half of 1934 entered before this advance in prices went into effect.

As already pointed out, the increase in the landed costs of Japanese pottery in the course of 1933 and 1934, although due partly to the advance in yen exchange resulting from the revaluation of the United States dollar, was partly attributable to the policy of the exporters' association in Japan in raising materially the prices of pottery in

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terms of yen. It is clear that if yen prices had remained unchanged or had advanced but little, the increase in the landed costs of Japanese pottery in the course of these 2 years would have been much less marked; as between the second half of 1933 and the first half of 1934 instead of a weighted average increase in landed costs substantially equaling the increase of about 12 percent in domestic costs of production, there would have been an increase of only about 5 percent, corresponding to the advance in yen exchange from an average of 28.6 cents to 30.0 cents.

TABLE 21 a.—*Domestic costs of production of white earthenware and landed costs of Japanese decorated pottery: Ratio of costs in subsequent half-year periods to costs in first half of 1933 as 100*

	Domestic white earthenware		Japanese decorated china			Japanese decorated earthenware		
	Second half 1933	First half 1934	Second half 1933	First half 1934	Second half 1934	Second half 1933	First half 1934	Second half 1934
Cups and saucers	89	104	121.5	134.7	136.9	117.6	126.8	131.2
Plates	90	103	126.3	149.0	153.0			
32-piece sets	90	103	134.1	149.6	153.1			
94-piece sets	88	103	148.0	173.0				
Average above items	89	103	132.5	151.6				
53-piece sets [1]			134.1	149.7	153.2			
93-piece sets [1]			149.0	163.4				
"Other" tableware			125.4	135.7	138.9	119.8	129.6	128.3
General average			131.1	144.8				

[1] The domestic costs for sets of these sizes were not computed but would necessarily show substantially the same percentage changes between the two periods as were shown for 32-piece and 94-piece sets.

LABOR COSTS AND OTHER FACTORS IN INCREASE OF DOMESTIC COSTS

As already pointed out, the Commission did not calculate for individual finished articles of domestic pottery the separate elements of cost of manufacturing—pay roll, material, etc. It is impossible, therefore, to determine precisely what part of the increase in average unit costs of production was due to increase in wages under the code. It is, however, possible to determine approximately the relative changes in the several factors of unit cost from the general operating accounts of the companies showing their aggregate expenditures for different purposes. The absolute figures (which rest in part on estimates) are given in table 25 in a subsequent section; they relate to 12 earthenware companies, which together account for the great bulk of the business. Table 22, derived from table 25, shows by percentages for the two half years of 1933 and the first half of 1934 the proportion of each class of expenditures in (*a*) the total manufacturing expenses of these companies, and (*b*) their total operating expenses, including selling and administrative expenses.

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TABLE 22.—*Operating accounts of 12 companies producing earthenware: Percentage distribution of expenses as between pay roll and other classes, 1933 and 1934 (6 months)*

[Data for 1933 approximate]

	First half 1933	Second half 1933	First half 1934
Percent of total manufacturing costs	100.0	100.0	100.0
Pay roll	54	59	59
All other	46	41	41
Material	----	26	25½
Fuel	----	4½	4½
Factory overhead	----	10½	11
Percent of total manufacturing, selling, and administrative expenses	100.0	100.0	100.0
Pay roll	48	54	54½
All other manufacturing	41	37	37½
Material	----	23½	23½
Fuel	----	4	4
Factory overhead	----	9½	10
Selling expenses	4	3½	3½
Administrative expenses	7	5½	4½

It will be seen from this table that pay roll was a materially larger proportion of total costs in the second half of 1933 and the first half of 1934 than in the first half of 1933. The increase in the share of pay roll in the expenses carried with it a decrease in the shares of all other items (so far as distinguished for the first half of 1933 and it is probable that for each of the items not distinguished there was a decline in proportion). As between the last half of 1933 and the first half of 1934 the only important change in the distribution of expenses was the further decrease in the proportion of administrative expenses in the total.

Table 23 shows by means of relative numbers the increase (or decrease) in the various expense items of the 12 companies producing earthenware. These figures are not based on average unit costs of production but on total expenditure, the amount of which was greatly influenced by changes in the volume of production. The output of these companies in the second half of 1933 was over 50 percent greater in quantity than in the first half, and the output in the first half of 1934 was about 8 percent less than in the second half of 1933 but over 40 percent greater than in the first half of that year.

TABLE 23.—*Operating accounts of 12 companies producing earthenware: Relative numbers showing changes in the several classes of expenses (approximate)*

	Relative to first half of 1933 as 100		First half of 1934 relative to second half of 1933 as 100
	Second half of 1933	First half of 1934	
Pay roll	167½	172	103
Other manufacturing expenses	136	140	102½
Material	(1)	(1)	101
Fuel	(1)	(1)	99
Factory overhead	(1)	(1)	108
Total manufacturing expenses	153	157½	103
Selling expenses	132	135	102
Administrative expenses	109½	88½	81
Total expense	149	151½	101½

[1] Not available.

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This table shows that the total manufacturing expense of the 12 companies was about 53 percent greater in the second half of 1933 than in the first half. As the volume of output apparently increased by about that percentage, it would appear that the average unit costs changed but little. On the other hand, the pay roll in the second half of the year was approximately 67½ percent greater than in the first half, apparently indicating that labor cost per unit of output increased, this increase being offset by reduction per unit in the other major expense items, especially in administrative expenses.

For the first half of 1934, after the code went into effect, the total manufacturing expenses of the 12 companies were about 3 percent greater than in the second half of 1933. Since there had been a decrease, estimated as about 8 percent, in the quantity of production, it would appear that unit costs had increased by 10 or 12 percent. The percentage increase in pay roll between these two periods was substantially the same as in other manufacturing expenses, but slightly greater than in the total for all expenses, since selling expenses increased only slightly and there was a decided decrease (in absolute amount) in administrative expenses. The increase in expenditures for material and fuel between these two periods was probably in part due to the operation of codes in the various supplying industries.

More detailed evidence as to the effect of the code on the wages and earnings of employees is presented in a subsequent section. It should be noted here that not all of the increase in wage rates following the adoption of the code was due to requirements of the code, an agreement with the workers' union having fixed minimum rates above the code minima.

TREND OF PRICES OF DOMESTIC TABLEWARE

It has been seen that the costs of production of tableware articles of pottery in the United States, although they apparently decreased somewhat in the second half of 1933 as compared with the first half, were appreciably higher in the first half of 1934 than in the immediately preceding half year. It was also seen, however, that the landed costs of Japanese tableware, which had already risen sharply between the first half and the second half of 1933, showed a further advance in the first half of 1934, approximately parallel with the increase in domestic costs of production. Because of that fact, and because the demand of consumers held up fairly well, American manufacturers were able to raise their prices when their costs increased.

The Commission did not investigate in detail the prices at which domestic manufacturers sold in the first half of 1933, but it was generally reported in the trade that there was no material change in price levels between the first and the second half of that year. The Commission made an investigation of comparative prices for the second half of 1933 and the first half of 1934.

It is the practice of each domestic producer of earthenware to maintain a standard basic price list for its tableware products, in which the various articles are quoted in a fixed relation to one another. Prices below or above this basic list are made by percentage discounts from or additions to that list. Ordinarily the given manufacturer maintains a flat percentage on or off list for all items, and changes that percentage from time to time according to market conditions.

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In other words, for any given company the prices, at least for most items, move in parallel.

Since the adoption of the code in the domestic industry the code authority has taken advantage of this method of quoting prices to determine approximately the average change in the prices of each company. This is done by computing (*a*) the list value of the articles actually sold by the company during a given period, and (*b*) the actual sales value resulting from the discounts in force. For each company there is thus computed the amount of actual average sales value per $100 of list value.

Such comparisons of the average sales value per $100 of list value for nine companies manufacturing earthenware in the second half of 1933 and the first half of 1934 were obtained by the Commission. Two of these companies showed a lower figure for the first half of 1934 than for the preceding period, indicating an average decline of prices—for 1 company 3 percent and for the other 7 percent. These were relatively small companies. The other 7 companies showed increases in sales value per $100 of list value, ranging from 3 to 23 percent. Weighting the percentages of change for the 9 companies by their respective sales in the 12-month period gives an average increase of about 11 percent.

In addition to making use of this method of ascertaining price movements the Commission obtained actual net selling prices for a number of items from several producing companies. Part of these related to articles sold to the general trade and others to articles sold principally to chain stores (the latter relate to sales of two companies which specialize in selling to chain stores).

For the articles sold to chain stores, 1 company showed average prices for the first half of 1934, 9.7 percent higher than for the last half of 1933, and the other company showed an increase of 10.8 percent. Corresponding figures obtained from these two companies for a number of articles having a relatively more expensive type of decoration, of the sort ordinarily sold in department stores and specialty pottery stores, showed an average increase in price of about 12½ percent.

Price quotations were obtained from a number of companies for 32-piece sets, and for articles not sold in sets (open-stock), with 3 typical decorations, namely, 1 spray, no line, 3 sprays and line, and semiborder. The percentages of increase in prices in the first half of 1934, above prices in the second half of 1933, are indicated below:

	32-piece set	Open stock
	Percent	*Percent*
One spray, no line [1]	18.3	9.1
Three sprays, with line [2]	7.0	6.0
Semiborder [3]	13.6	6.6
Average	15.0	7.7

[1] Average for 11 companies.
[2] Average for 8 companies.
[3] Average for 4 companies.

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Combining the data from these various computations, it appears that, on the average, prices were about 10 percent higher in the first 6 months of 1934 than in the preceding period.

Evidence that there was a considerable increase in prices of domestic pottery between the last half of 1933 and the first half of 1934 is corroborated by the very considerable increase in the average unit value of the several classes of pottery sold by domestic producers as between these two periods. In table 13 are given the total number of pieces of each class of decorated ware sold during these two half-year periods and the total value of these sales. Table 24 below shows average unit values computed from these data. It must not, of course, be supposed that the increases in these average unit values so computed are wholly due to higher prices. Such an increase may result from a shift in sales from articles of lower grade to those of higher grade. There may also have been shifts in the opposite direction. There can be no doubt, however, that the most important factor causing the changes in average unit values was the advance in prices of comparable articles.

TABLE 24.—*Earthenware and china household table and kitchen pottery, decorated: Average unit values of sales of principal classes, by domestic producers* [1]

	Total sales, two periods	Average value per dozen pieces		1934 relative to 1933
		July–December 1933	January–June, 1934	
	Thousands of dollars			*Percent*
Dinnerware sets:				
Not over 31 pieces	516	$0.684	$0.867	126.8
32 pieces	2,211	.781	.930	119.1
33–52 pieces	702	.860	.981	114.1
53–56 pieces	1,030	1.078	1.269	117.7
63–92 pieces [2]				
93–96 pieces	589	1.130	1.258	111.3
97 pieces and over	514	1.230	1.322	107.5
Cups and saucers, sold in pairs	1,162	.555	.670	120.7
Cups alone	995	.857	.905	105.6
Saucers alone	408	.456	.498	109.2
Plates	2,919	.934	.965	103.3
All other dinnerware	3,157	1.075	1.167	108.6
Kitchenware	1,430	1.487	1.614	108.5
Simple average				112.7
Weighted average				111.3

[1] This table shows only indirectly the changes in prices of identical articles, being calculated by dividing total value of sales of each group by total quantity sold. For absolute quantities and values, see table 13.
[2] Data not comparable.

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OPERATING AND FINANCIAL RESULTS OF DOMESTIC PRODUCERS

Consolidated operating statement of 12 producers of earthenware, 1933 and 1934

The Commission obtained from 12 companies producing earthenware their general operating statements for the first and second halves of 1933 (for 3 of these companies, 1 large and the other 2 rather small, the separation of the two periods was based on estimate) [1] and for the first half of 1934; the value of sales was later secured for the second half of 1934. These 12 companies cover the great bulk of the domestic production of household table and kitchen pottery. Data were also obtained for the 3 principal companies producing china, but the totals for the 3 companies cannot be made public without virtually disclosing the operations of individual concerns. Table 25 shows the consolidated operating statement for the producers of earthenware by half-year periods.

The data for these 12 companies probably show greater improvement in volume of business and operating conditions between the first half of 1933 and the 2 subsequent half-year periods than was shown by all domestic producing companies taken together, the business of the concerns not covered by this statement having in general improved less than that of those here included. This conclusion is substantiated by the facts regarding the increase in the number of wage earners employed by the respective groups of companies as shown in the table on page 81. For the first 20 weeks of 1934 the number of employees of 13 firms manufacturing earthenware, including the 12 which are covered by table 25, was 54 percent greater than during the first 20 weeks of 1933. On the other hand, for 15 other companies (mostly small) producing earthenware less complete pay-roll data indicated an increase in the number employed of only 24 percent (approximate) as between these two periods. For the 28 companies together the increase in number employed was about 46½ percent, as against 54 percent for the 13 companies covered by the detailed pay-roll study.

[1] For these 3 companies the totals for the various operating expenses and for net return were available for the year 1933 as a whole but not by half-year periods. The total value of sales was available by half-year periods. All the other items have been allocated as between the first and second half of the year by the same percentage, for each company, as the value of sales. This procedure involves the possibility of error in two directions:

a. The value of the product actually manufactured (sales value of production) in the 2 half-year periods may not have been proportional to the value of the product sold in those periods. As a matter of fact, for the 9 other companies producing earthenware covered by the table, taken as a group, sales exceeded production in the first half of 1933 and production exceeded sales in the second half. All manufacturing expenses vary with volume of production rather than volume of sales.

b. The relative magnitude of the various items of operating expense as compared with one another, and the ratio of net operating return to sales value of production, are not likely to be the same with a larger volume of output as with a smaller. For the 9 companies, for which data covering the 2 half-year periods separately were available, considered as a group, there was a marked increase in sales value of production in the second half of 1933, with consequent important effects upon the distribution of the expense items and the rate of net return.

It so happens that for 2 of the 3 companies (one being the large concern) for which no separate half-yearly data were obtained, the sales in the second half of 1933 were not materially different from those in the first half of the year, and apparently their production conformed rather closely to their sales. Consequently the distortion resulting from the use of the above-mentioned method of allocation with respect to these 2 companies would not be great, and the effect of the estimates in question on the aggregates for the 12 companies would be comparatively small. It is probable, however, that the combined figures as given in table 25 slightly understate the increase as between the first and second halves of 1934 (*a*) in sales value of production, (*b*) in amount of pay roll, and (*c*) in amount of net return. To the extent that this error exists the increases in these same items for the first half of 1934 as compared with the second half of 1933 may be slightly overstated.

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TABLE 25.—*Pottery: Consolidated operating statement for 12 domestic companies producing earthenware*

[Data for the 2 periods of 1933 approximate; see footnote on p. 73]

	First half 1933		Second half 1933		First half 1934		Second half 1933 relative to first half 1933 as 100	First half 1934 relative to second half 1933 as 100
	Amount	Percent of sales value of product	Amount	Percent of sales value of product	Amount	Percent of sales value of product		
							Percent	*Percent*
Net sales	$5,266,165		$7,416,352		$7,439,042		141	100
Less purchased ware	11,369		24,740		6,922			
Ware inventory variation	−200,541		+403,059		+497,207			
Sales value of production	5,054,255	100.0	7,794,671	100.0	7,929,327	100.0	154	102
Expenses:								
Labor, material, fuel, and factory overhead	4,262,068	84.3	6,530,676	83.8	6,709,448	84.6	153	103
Labor [1]	2,300,000	45.5	3,855,344	49.5	3,962,969	50.0	167½	103
Material			1,689,202	21.7	1,709,960	21.6		101
Fuel	1,962,068	38.8	305,563	3.9	303,413	3.8	136	99
Factory overhead			680,567	8.7	733,106	9.3		108
Selling expenses	196,531	3.9	259,706	3.3	264,869	3.3	132	102
Administrative expenses	343,098	6.8	376,377	4.8	304,461	3.8	109½	81
Total	4,801,697	95.0	7,166,759	91.9	7,278,778	91.8	149	101½
Net return on sales	252,558	5.0	627,912	8.1	650,549	8.2	248½	103½

[1] Expenditure for labor estimated by taking into consideraton (*a*) changes in pay roll for these same 12 companies between the first 20 weeks of 1933 and the first 20 weeks of 1934, and (*b*) the actual pay-roll expenditures for 9 of the 12 companies for the first half of 1933 as a whole. The figure for other manufacturing expenses is obtained by subtracting estimated labor expense from the total manufacturing expense. The margin of error in the figure for labor probably does not exceed 2 percent.

The first half of 1933, like the year 1932, was a period of deep depression in the pottery industry. In the second half of the year there was a very marked increase in sales. Apparently demand of final consumers had risen materially, and it may be also that dealers were inclined to stock up in anticipation of higher prices. The manufacturers themselves stocked up, perhaps because of anticipated higher costs under the code; whereas in the first half of 1933 their sales considerably exceeded production, in the second half production was well above sales, inventories being increased. There was little change in unit prices, so that the increase of over 50 percent in the sales value of production of the 12 companies covered by table 25 represents a substantial increase in quantity of output. This does not necessarily mean that the aggregate number of pieces made increased by this percentage, since there was apparently some shift from lower-grade to higher-grade articles in the production.

In the first half of 1934 the value of sales of these 12 companies was slightly greater than in the second half of 1933, and, as in the preceding half year, production materially exceeded sales. The increase in sales value of production was, however, wholly due to higher prices, quantities declining. It has been seen (p. 72) that the average increase in prices between these two periods was about 10 percent. Had prices remained unchanged, the sales value of the output of these 12 companies in the first half of 1934 would have been about $7,200,000,

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or about 8 percent less than in the second half of 1933, although still over 40 percent greater than in the first half of that year. These changes in volume of business are corroborated (approximately) by the data as to total number of pieces sold by domestic producers (see table 11), taking into consideration the important factor of changes in inventory and the fact that the 12 companies included in table 25 increased their business more than producers of earthenware not so included.

The total expenditures of these 12 companies producing earthenware were much larger in the second half than in the first half of 1933, primarily because of the bigger volume of business; in the first half of 1934, despite decrease in quantity of output, expenditures increased further, by about 1½ percent, by reason of higher wages and higher costs of materials. The increase in costs between the two 1933 periods, however, was less marked than the increase in value of product, and as a consequence the net operating return of the producers was about two and one-half times greater in absolute amount in the second half than in the first half of the year. In the first half of 1934 the net return was somewhat larger than in the last half of 1933.

The relative importance of pay roll as a factor in total manufacturing costs, and in total expenditures for manufacturing, selling, and administration, during the three periods has already been discussed. (See table 22.) In table 25 is shown for the 12 companies, the ratio of pay-roll expenditures (as well as the ratios for other items) to sales value of production, which figure of course includes the net return to the companies. It will be seen that the share of labor rose from about 45½ percent in the first half of 1933 to about 49½ percent in the second half and to 50 percent in the first half of 1934. The net return to producers represented, in the first period, about 5 percent, and in the other two periods about 8 percent of the sales value of production. Since both labor cost and net operating return to the employers were much larger shares of the value of product in the first half of 1934 than in the first half of 1933, it follows that the combined expenditures for all other purposes declined in proportion; together they constituted about 49½ percent of the sales value of production in the earlier period and 42 percent in the first half of 1934. The decline in the proportion going to administrative expenses was particularly marked.

The Commission did not obtain the operating accounts of these 12 companies for the second half of 1934 or for the year as a whole. It did secure for each company the value of the sales in the second half of the year. For the 12 companies combined this value of sales was substantially the same as in the first half of 1934. So far as is known to the Commission, there were during the second half of 1934 no important changes, in either direction, with respect either, on the one hand, to the prices of pottery or, on the other hand, to the rates of pay of wage earners or the costs of materials. It seems probable, therefore, that the aggregate net operating return of these 12 companies for the second half of 1934 was not materially different from that in the first half. If this was true the total net return for 1934 must have been materially greater in amount, and in percentage to the value of sales, than in 1933 considered as a whole, the first half of 1933 having been much less favorable in its operating results than either of the three succeeding half-year periods.

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Consolidated operating data for larger and smaller producers, 1933 and 1934

Table 26 presents data of general operating results in the earthenware industry similar to those shown in table 25, distinguishing between 6 large and medium sized producers, on the one hand, and 6 small producers on the other (for 1 of the larger and 2 of the smaller companies the segregation between the 2 half years of 1933 was made by estimate. (See footnote on p. 73 as to the possible error in these estimates.) It will be seen that for all three periods the net return of the smaller producers represented a much smaller proportion of the value of their product than in the case of the large- and medium-sized producers. Selling and administrative expenses constituted a decidedly larger proportion of value of product for the smaller concerns than for the others.

TABLE 26.—*Pottery: Consolidated operating statement for large and medium sized and for small companies producing earthenware.*

[Data for the 2 periods of 1933 approximate; see footnote on p. 73]

	First half 1933		Second half 1933	
	Amount	Percent of sales value of product	Amount	Percent of sales value of product
LARGE AND MEDIUM PRODUCERS (6 COMPANIES)				
Net sales	$4,367,345		$6,157,942	
Less purchased ware	8,954		22,386	
Ware inventory variation	−164,039		+380,453	
Sales value of production	4,194,352	100.0	6,516,009	100.0
Expenses:				
Labor, material, fuel, and factory overhead	3,543,163	84.5	5,435,178	83.4
Labor	3,543,163	84.5	3,217,696	49.4
Material			1,413,498	21.7
Fuel			246,961	3.8
Factory overhead			557,023	8.5
Selling expense	138,546	3.3	183,014	2.8
Administrative expense	270,811	6.5	292,986	4.5
Total	3,952,520	94.3	5,911,178	90.7
Net profit or loss on sales	241,832	5.7	604,831	9.3
SMALL PRODUCERS (6 COMPANIES)				
Net sales	898,820		1,258,410	
Less purchased ware	2,415		2,354	
Ware inventory variation	−36,502		+22,606	
Sales value of production	859,903	100.0	1,278,662	100.0
Expenses:				
Labor, material, fuel, and factory overhead	718,905	83.6	1,095,498	85.8
Labor	718,905	83.6	637,648	49.9
Material			375,704	21.6
Fuel			58,602	4.6
Factory overhead			123,544	9.7
Selling expense	57,985	6.7	76,692	6.0
Administrative expense	72,287	8.4	83,391	6.5
Total	849,177	98.7	1,255,581	98.3
Net profit or loss on sales	10,726	1.3	23,081	1.7

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TABLE 26.—*Pottery: Consolidated operating statement for large and medium sized and for small companies producing earthenware*—Continued

[Data for the 2 periods of 1933 approximate; see footnote on p. 73]

	First half 1934		Second half 1933 relative to first half 1933 as 100	First half 1934 relative to second hal 1933 as 100
	Amount	Percent of sales value of product		
LARGE AND MEDIUM PRODUCERS (6 COMPANIES)			*Percent*	*Percent*
Net sales	$6,102,896		141	99
Less purchased ware	3,746			
Ware inventory variation	+482,752			
Sales value of production	6,581,902	100.0	155	101
Expenses:				
Labor, material, fuel, and factory overhead	5,538,187	84.1	153	102
Labor	3,292,156	50.0	153	102
Material	1,389,913	21.1		98
Fuel	247,765	3.8		100
Factory overhead	608,353	9.2		109
Selling expense	177,198	2.7	132	97
Administrative expense	225,734	3.4	108	77
Total	5,941,119	90.2	149½	100½
Net profit or loss on sales	640,783	9.8	250	106
SMALL PRODUCERS (6 COMPANIES)				
Net sales	1,366,146		140	106
Less purchased ware	3,176			
Ware inventory variation	+14,455			
Sales value of production	1,347,425	100.0	148½	105
Expenses:				
Labor, material, fuel, and factory overhead	1,171,261	96.9	152	107
Labor	670,813	49.8	152	105
Material	320,047	23.7		116
Fuel	55,648	4.1		95
Factory overhead	124,753	9.3		101
Selling expense	87,671	6.5	132	114
Administrative expense	78,727	5.8	115	94½
Total	1,337,659	99.3	148	106½
Net profit or loss on sales	9,766	.7	215	42

Consolidated operating and financial statements for 12 companies producing earthenware, 1929–33

In addition to the operating statements for 12 earthenware companies by half years of 1933 and the first half of 1934, the Commission obtained operating and financial statements for 12 producers of earthenware covering the 5-year period 1929–33. These included the same six large and medium sized companies as were included in the half-year data for 1933 and 1934. They included also 6 small companies, 4 of which were included in the half-year data for 1933 and 1934 shown in table 26. It is estimated that about 70 percent of the total United States production of household earthenware at the present time is produced by the 12 companies covered by this comparison.

The data for all 5 years relate only to the companies which have continued in business throughout the period. Some concerns in operation in 1929 have gone out of business. For this reason the

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data for the 12 companies show less decline in amount of sales than would appear if data for all companies operating each year could have been obtained. On the other hand, the 1929 profits of those concerns which have since gone out of business were probably at a lower rate than those then earned by the concerns that have continued in operation. Table 27 shows for all 12 companies combined, and for two groups of companies, classified according to size, the general operating and financial results for the 5 years 1929–33.

TABLE 27.—*Domestic earthenware industry: Summarized operating and financial statements for 12 companies, 1929–33*

	Total assets (end of year)	Net worth (end of year)	Net sales	Cost of sales	Operating profit
Large and medium companies:					
1929	$13,035,268	$12,261,298	$15,275,064	$13,688,965	$1,586,099
1930	12,313,248	11,771,821	12,997,920	11,927,487	1,070,433
1931	12,367,142	12,058,097	11,976,496	10,847,850	1,128,646
1932	11,835,485	11,482,805	9,384,113	8,919,704	464,409
1933	11,470,723	11,282,376	10,525,287	9,686,929	838,358
Small companies:					
1929	3,733,346	2,690,264	3,814,144	3,660,508	153,636
1930	3,505,527	2,476,854	2,794,028	2,853,608	−59,580
1931	3,403,603	2,312,483	2,535,357	2,718,331	−182,974
1932	3,221,215	2,119,661	2,456,074	2,580,990	−124,916
1933	3,148,489	2,075,582	2,583,813	2,597,557	−13,744
All companies:					
1929	16,768,614	14,951,562	19,089,208	17,349,473	1,739,735
1930	15,818,775	14,248,675	15,791,948	14,781,095	1,010,853
1931	15,770,745	14,370,580	14,511,853	13,566,181	945,672
1932	15,056,700	13,602,466	11,840,187	11,500,694	339,493
1933	14,619,212	13,357,958	13,109,100	12,284,436	824,614

	Miscellaneous net credits	Net income	Sales per dollar of total assets	Percent operating profits to net sales	Percent net income to total assets	Percent net income to net worth
Large and medium companies:						
1929	$27,560	$1,613,659	$1.17	10.4	12.4	13.2
1930	72,188	1,142,621	1.06	8.2	9.3	9.7
1931	99,737	1,228,383	.97	9.4	9.9	10.2
1932	77,547	541,956	.79	4.9	4.6	4.7
1933	67,501	905,859	.92	8.0	7.9	8.0
Small companies:						
1929	5,225	158,861	1.02	4.0	4.3	5.9
1930	−41,447	−101,027	.80	−2.1	−2.9	−4.1
1931	−44,750	−227,724	.74	−7.2	−6.7	−9.8
1932	−31,539	−156,455	.76	−5.1	−4.9	−7.4
1933	−34,759	−48,503	.82	−.5	−1.5	−2.3
All companies:						
1929	32,785	1,772,520	1.14	9.1	10.6	11.9
1930	30,741	1,041,594	1.00	6.4	6.6	7.3
1931	54,987	1,000,659	.92	6.5	6.3	7.0
1932	46,008	385,501	.79	2.9	2.6	2.8
1933	32,742	857,356	.90	6.3	5.9	6.4

It will be seen that there was for all 12 companies combined a sharp decrease in the amount of sales in 1930 and another sharp decrease in 1932, their sales in the latter year being about 38 percent less than in 1929, in value. It is probable that a considerable part of this decrease was due to lower prices, but table 11 indicates that the greater part was the result of reduction in quantities. In 1933 sales were about 11 percent greater in value than in 1932; although sales in the first half of 1933 were at a smaller rate than in 1932, in the second half of 1933 there was a very marked increase.

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The total assets of the 12 companies declined about 13 percent between 1929 and 1933, each year showing some decrease, and the net worth showed substantially the same movement. The ratio of value of sales to total assets declined steadily in each year from 1929 to 1932, being $1.14 per dollar of assets in the first of these years and only $0.79 in 1932. In 1933, however, the ratio was $0.90.

The operating profit of the 12 companies fell greatly in 1930 and again in 1932. In the latter year the operating profit was only $339,000, or less than one-fifth as great as in 1929. In 1933 the operating profit much more than doubled that of the previous year, but it was still less than half as great as in 1929. The ratio of operating profit to value of sales fell from 9.1 percent in 1929 to 2.9 percent in 1932, but rose to 6.3 percent in 1933. The net income of the companies as a group in each year exceeded somewhat their operating profit on account of miscellaneous net credits from other sources. The ratio of net income to net worth fell from 11.9 percent in 1929 to 2.8 percent in 1932, rising to 6.4 percent in 1933, the latter figure being not materially different from the ratios of 1930 and 1931. It may be noted that if one large company, operating under exceptionally favorable conditions, be excluded from this group, the net income of the other 11 companies in 1933 was 4.1 percent of their net worth.

As already pointed out, operating conditions in the earthenware industry for the year 1934 as a whole were apparently more favorable, as regards volume of sales, prices, and profits, than for the year 1933 as a whole, the first half of 1933 having been exceptionally unfavorable.

The general conclusion from this analysis appears to be that, except in 1932 and the early months of 1933, the business depression had less effect on volume of sales and amount of profits in the earthenware industry than in many other important manufacturing industries. The period during which operating conditions in this industry were most unsatisfactory coincides with the period during which the Japanese yen was most heavily depreciated and the landed costs of Japanese pottery lowest. Imports of pottery from Japan during that time were somewhat greater in quantity than in 1931, while the domestic production was smaller. Apparently, however, a factor of at least equal importance in causing the unfavorable situation of the domestic producers was a very restricted consumer demand for pottery in 1932 and the earlier months of 1933. The increase in the competition of glass cups, saucers, and plates during this period was an element in the depression of the pottery industry. (See p. 87.)

Table 27 shows further that the operating results for the large and medium sized companies, as a group, have at all times been more favorable than those for the small companies, as a group, and that the business depression affected the large companies less seriously than the small companies (there are, of course, certain individual exceptions).

The small companies have maintained approximately a constant proportion of the total volume of business as indicated by value of net sales, roughly 20 percent in each year. On the other hand, whereas the larger companies earned some operating profit in every year, the 6 smaller companies covered by this table, as a group, lost money on operations in each year from 1930 to 1933; their losses were greatest in 1931 and were comparatively small in 1933 (it will be recalled that a somewhat different group of 6 small companies,

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comprising 2 not covered by table 27, showed a small net operating profit in 1933; see table 26). In addition to their losses from operation, these small companies in each year from 1930 to 1933 had miscellaneous net debits, so that there was a large deficit in their net income, less marked, however, in 1933 than in the 3 preceding years.

Financial results of individual companies

It is not, of course, proper for the Commission to make public the financial results of individual companies by name, and if the absolute figures for separate companies were published without name it would be possible for those in the trade to determine, at least in some cases, to which company the data relate. It is, however, possible, without risk of disclosing the identity of the individual company, to show certain ratios relating to these companies individually, although it seems preferable not to show even these ratios for the one company whose financial results have been most favorable. Table 28 shows these ratios for the other 11 companies for the 2 years 1929 and 1933.

In considering this table it should not be inferred that all companies showing losses in 1933 were small companies or that all those showing profits were large companies, although in general, as has been pointed out, the small companies have been less successful than the larger companies. The ratio of value of sales to value of assets for most of the 11 companies individually was smaller in 1933 than in 1929 with three exceptions. For all but two companies the other ratios (percentage of operating profit to net sales, percentage of net income to total assets, and percentage of net income to net worth) were less favorable in 1933 than in 1929.

For 1933 as a whole, 6 of the 12 companies (1 not shown separately) showed ratios of net income to net worth ranging from 4.5 percent to more than 10 percent (the latter figure relating to the company whose data are not shown separately); 2 companies practically broke even, and 4 showed very considerable losses, their net income deficit ranging from 2.6 to 17.0 percent of their net worth. It will be recalled also that the operating results were in general more favorable in the second half of 1933 than in the first half.

TABLE 28.—*Domestic earthenware industry: Summarized financial operating statement by companies for 1929 and 1933*

Company no.	Sales per $1 of total assets		Ratio of operating profit to net sales		Ratio of net income to total assets		Ratio of net income to net worth	
	1929	1933	1929	1933	1929	1933	1929	1933
			Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
1	$1.22	$0.82	0.5	0.4	0.5	0.1	0.6	0.2
2	1.23	1.39	−1.5	−5.7	−2.7	−8.1	−3.0	−9.2
3	1.26	1.00	14.5	8.4	14.3	6.8	17.8	6.8
4	1.39	.95	6.7	5.5	9.6	4.5	9.6	4.9
5	1.04	.72	14.6	9.4	16.2	8.4	16.6	8.4
6	1.07	1.11	−2.8	.8	−1.7	(1)	−1.7	(1)
7	.91	1.77	(1)	7.8	−1.8	7.1	(2)	(2)
8	1.80	.93	5.6	−8.3	9.7	−8.4	12.1	−10.5
9	.75	.33	.8	−13.1	.7	−6.0	1.7	−17.0
10	1.11	.76	11.5	−7.3	14.4	−2.4	15.3	−2.6
11	.78	.76	3.3	9.0	.8	3.7	1.0	4.5
Total, 11 companies	1.12	.85	8.8	4.2	10.0	3.7	11.2	4.1
Total, including Company No. 12	1.14	.90	9.1	6.3	10.6	5.9	11.9	6.4

[1] Less than ½₀ of 1 percent.
[2] The "net worth" of this company was negligible in 1929 and a "deficit" in 1933, but it showed a net income amounting to 7 percent of total assets.

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EMPLOYMENT AND EARNINGS

Number of employees in first 20 weeks of 1933 and 1934

The Commission obtained data regarding number of wage earners in the household table and kitchen pottery industry on three different bases: (*a*) Statistics of total number of wage earners (and total amount of pay roll) for 13 major producers of earthenware in the first 20 weeks (10 pay periods) of 1933 and in the first 20 weeks of 1934; (*b*) less complete data as to number of wage earners for 15 other less important producers of earthenware, from which estimates of the total employed by them in the first 20 weeks of 1933 and 1934 have been made; and (*c*) statistics of number of wage earners, distinguishing sex and distinguishing pieceworkers from timeworkers, for 14 companies making earthenware and 3 making china, covering one pay period in May 1933 and one in May 1934.

The following statement shows the comparative number of wage earners (partly estimated) in the household table and kitchen ware industry in the first 20 weeks of 1933 and 1934. It will be seen that the average number in the industry as a whole was about 47 percent greater in the later period than in the earlier. The increase was much greater for the 13 companies for which detailed pay-roll studies were made than for the other companies producing earthenware.

	First 20 weeks of—		Percent increase
	1933	1934	
Earthenware branch:			
13 companies covered by pay-roll study	5,995	9,226	54
15 other companies [1]	2,006	2,493	24
Total	8,001	11,719	46½
China branch: Portion of employees working on household ware [1]	120	220	
Total, household table and kitchen ware	8,121	11,939	47

[1] Estimated.

The companies in the earthenware branch of the industry fall into two distinct groups—(*a*) the large and medium sized concerns, and (*b*) the small concerns. The distinction is fairly sharp, as may be seen from the fact that for the smallest company in group (*a*) the average number employed in the first 20 weeks of 1934 was 725, whereas for the largest of the companies in the smaller group the average number employed in that period was only 307. It is of some significance to compare these two groups of companies with respect to the relative change in the number employed as between the first 20 weeks of 1933 and of 1934. The following statement shows that the percentage of increase was much greater for the large and medium sized companies than for the small companies.

Employment by 13 companies producing earthenware—average for first 10 pay periods (20 weeks) of 1933 and of 1934, by groups of companies

	First half 1933	Second half 1934	Percent increase
6 large and medium sized companies	4,665	7,499	61
7 small companies	1,330	1,727	30
Total, 13 companies	5,995	9,226	54

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Employment in the last half of 1933

The above comparisons relate to the first 20 weeks of the 2 years. The pottery business in the second half of 1933 was very much more active than in the first half of that year; the volume of production was, in fact, 8 or 9 percent greater in that period than in the first half of 1934. It is probable that the number of wage earners on the pay rolls was not materially different for the first half year following the adoption of the code, which went into effect December 7, 1933, than for the half year immediately preceding, the tendency of code provisions regarding working hours to spread employment (discussed below) being largely, and perhaps wholly, offset by decline in production.

Effect of code provisions on employment

The principal cause of the increase in number employed in the household pottery industry between the first 20 weeks of 1933 and the first 20 weeks of 1934 was the great expansion in volume of production. The question to what extent the code provisions relating to hours of labor, which went into effect in December 1933, were also a factor in increasing employment cannot be answered with precision.

The code in the china and porcelain manufacturing industry, under which manufacturers of household table and kitchen pottery operate, provides that the maximum hours of labor in the industry shall be 40 per week. Watchmen and kiln firemen are allowed to work 42 hours per week. In the event of increase of production, after using up all available labor, provision is made for an appeal to the administrator to grant an extension of working time.

It is impossible to determine with precision the average number of hours actually worked by employees before the code went into effect. About half of the wage earners are pieceworkers, and prior to code operation most producers kept no record of the time of such workers, although it is probable that most pieceworkers on any given day worked the same number of hours as timeworkers. The standard working time of timeworkers prior to code operation was 9 hours per day, with a Saturday half holiday, or a total of 49½ hours per week. The actual hours worked per week, however, varied, to some extent, at different times, for different companies, and for different classes. It is possible that in the first half of 1933, when the industry was severely depressed, the average working time per week was somewhat below the standard time. Available data, however, indicate that part-time work was not widely prevalent, the lack of demand being reflected, for the most part, in a reduced number of names on the pay rolls.

For the 13 manufacturers of earthenware for which detailed statistics of pay roll, covering the first 20 weeks of 1933 and 1934, were obtained, it is possible to make a rough comparison between the increase in the number of workers and the increase in the volume of output. The sales value of the production of 12 out of these 13 companies in the first half, i. e., 26 weeks, of 1933 was $5,054,000 (partly estimated) and in the first half of 1934, $7,929,000. As already shown, the Commission's analysis of prices indicated that on the average prices in the first half of 1934 were about 10 percent higher than in the second half of 1933, and general information indicated that there had been little change in prices as between the first half and the

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second half of 1933. The change in volume of output may therefore be estimated, approximately only, by reducing the above figure of sales value of production for the first half of 1934 by about 9 percent, giving in round figures $7,200,000. Comparing this figure with the sales value of production for the first half of 1933 indicates an increase of a little over 40 percent in quantity of output.

As already stated, there was an increase of about 54 percent in the number of workers employed by these 13 companies as between the first 20 weeks of 1933 and of 1934. It is improbable, however, that this same percentage held true of the first 26 weeks (half years) of the 2 years, since the pottery business in May and June 1933 was more active than in the earlier months of the year, whereas activity in May and June of 1934 was not greater (perhaps in fact somewhat less) than in earlier months of that year. However, it is likely that, for the entire half year, average employment was at least 50 percent greater in 1934 than in 1933. Comparing this percentage with the increase of about 40 percent (an approximate figure only) in quantity of output points to the probability that the production per worker was considerably less in the first half of 1934 than in the corresponding period of 1933. This presumably reflects the effect of the code in reducing average working time per week and thus spreading employment.

Classification of employees

Roughly two-fifths of the wage earners in the household table and kitchen pottery industry are women. Of the men, about half are pieceworkers, but among the women timeworkers considerably outnumber pieceworkers. Table 29 shows for 14 companies producing earthenware and 3 producing household china the distribution of the wage earners by sex and method of compensation in May 1933 and May 1934. It will be seen that the number of women employed increased somewhat more than the number of men, and that the number of timeworkers of both sexes increased more than the number of pieceworkers, the difference being particularly marked in the case of women.

TABLE 29.—*Employment in the pottery industry by kinds of employees*

	Number of employees			Percentage of total number of employees		
	Men	Women	Men and women	Men	Women	Men and women
May 1933:						
Pieceworkers	2,239	1,301	3,540	31	18	49
Timeworkers	2,121	1,524	3,645	30	21	51
Total	4,360	2,825	7,185	61	39	100
May 1934:						
Pieceworkers	3,251	1,788	5,039	30	16	46
Timeworkers	3,242	2,571	5,813	30	24	54
Total	6,493	4,359	10,852	60	40	100
Percent of increase in employment in May 1934 over 1933:						
Pieceworkers	45	37	42	----	----	----
Timeworkers	53	68	59	----	----	----
Average	49	54	51	----	----	----

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Provisions of the code and the union agreement concerning wages

The code of the chinaware and porcelain manufacturing industry, which went into effect on December 7, 1933, provided a minimum wage of 40 cents per hour for male employees and of 32 cents for females. Special provision is made that where females do the same work as males they shall receive the same pay. Learners, the number of whom shall not exceed 5 percent of all employees, may be paid at a lower rate but not less than 80 percent of the minimum wage, and for not more than 3 months.

At practically the same time with these code provisions there also went into effect an agreement between most employers in the household table and kitchen ware industry and the National Brotherhood of Operative Potters, which agreement contained important provisions concerning wages. The National Brotherhood of Operative Potters has been in existence for many years, and the wages for many classes of employees in most pottery plants had long been subject to agreement between the employers and this brotherhood. Only 1 large plant and a few small plants making earthenware and 1 of the 3 plants making household china tableware operate without dealing with this union. Consequently the agreement with the brotherhood, which went into effect on December 9, affected the working conditions for the great majority of the plants and employees in the industry.

The agreement included two important provisions: (1) That the minimum pay (fixed by the code at 40 cents per hour for men and 32 cents for women) for union workers should be 45 cents per hour for men and 35 cents for women; and (2) that piece rates should be increased 12½ percent and the rates per hour of timeworkers not affected by the minima also increased 12½ percent. This 12½ percent increase in rates was held by the parties at interest to be called for by a provision of the code (Article IV (e)) which reads as follows:

> All members of this industry shall endeavor to increase the pay of all employees [already receiving] in excess of the minimum wage, as herein set forth, by an equitable adjustment of all pay schedules.

If there had been no such increase, the reduction in working hours under the code would have resulted in lower weekly earnings for all employees not subject to the minimum rates. Some women, even in the unionized plants, were considered to be employed on nonunion work and to these only the code minimum of 32 cents per hour applied.

It may be noted that the union agreement contained no provisions other than those of the code with respect to hours of labor.

Wage rates of timeworkers as affected by the code and the union agreement

Table 30 compares the average hourly wages of timeworkers employed by 14 of the most important companies making earthenware. The data relate to one pay-roll period in May 1933 and one in May 1934, but for hourly rates, as distinguished from weekly earnings, a single pay-roll period furnishes a fairly accurate basis for comparison. The table is arranged to distinguish the effects in increasing wages of (*a*) the code minima, (*b*) the 12½ percent increase in piece rates and in pay of timeworkers not subject to minima, and (*c*) the union minima in increasing pay above the code minima.

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It will be seen that for men the average wage of timeworkers per hour in the 1933 period was 52.6 cents and in the 1934 period 61.4 cents, an increase of 16.7 percent. For women the increase was much more marked, from 26.5 to 35.6 cents per hour, or by 34.4 percent. For men the increase was very largely (to the extent of nearly two-thirds) due to the 12½-percent provision of the union agreement, whereas for women the dominant factor in increasing wages was the minima fixed by the code, although the still higher minima fixed by the union constituted an important factor. For men and women combined, about two-fifths of the increase in wages is to be attributed to the minima fixed by the code; about two-fifths to the provision of the union agreement increasing by 12½ percent the pay of those not subject to minima which may be considered as carrying out the purpose expressed in the code, and about one-fifth (18.9 percent) to the raising, by agreement with the union, of the minimum pay above the rates fixed in the code.

TABLE 30.—*Household tableware and kitchenware industry, earthenware branch: Hourly wage rates of timeworkers in relation to code and union provisions*

	Cents per hour			Percentage relation		
	Men	Women	Men and women	Men	Women	Men and women
Wage rates:						
A. As paid in 1933	52.6	26.5	40.8	100.0	100.0	100.0
B. As affected by the code minima (men, 40 cents; women, 32 cents)	54.5	32.3	44.5	103.6	122.0	109.1
C. As affected by the code minima and the 12½ percent increase	60.2	33.3	48.1	114.4	125.7	117.9
D. As fully affected by code and union provisions (actually paid 1934) [1]	61.4	35.6	49.8	116.7	134.4	122.1
Composition of total increase:						
Effect of code minima	1.9	5.8	3.7	21.6	63.7	41.1
Effect of 12½ percent increase	5.7	1.0	3.6	64.8	11.0	40.0
Effect of union minima [2]	1.2	2.3	1.7	13.6	25.3	18.9
Total	8.8	9.1	9.0	100.0	100.0	100.0

[1] Including the union minima of 45 cents for men and 35 cents for women.
[2] Additional to code minima.

Earnings of pieceworkers

No data were obtained with respect to the actual average weekly earnings of pieceworkers as a separate group for the period preceding and the period following the adoption of the code and the agreement with the union. As already stated, the union agreement provided for increasing all piece rates by 12½ percent, so that any union pieceworker, unless his pay was still further increased by the minima provided by the union agreement, obtained 12½ percent more for a given quantity produced than before; as a matter of fact, the minimum provisions of the union agreement had relatively little effect upon pieceworkers, most of whom earned more than the minimum rates. The relation of the actual average weekly earnings of pieceworkers after the code and union agreement went into effect to their average earnings before that time depends, of course, not merely on the rate per piece but on the number of pieces produced in a given

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length of time and the number of hours per week actually worked. Available information indicates that the weekly earnings of pieceworkers in the first half of 1934 were somewhat higher than in the first half of 1933. The same statement might not hold true if it were possible to compare the first half of 1934 with the last half of 1933, since the average working time of pieceworkers per week was probably considerably shorter in the later than in the earlier period.

Average weekly earnings of all employees

As already stated, the Commission obtained for 13 firms making earthenware, including all of the major and a number of the smaller companies, actual pay-roll data for the first 10 pay periods of 1933 and of 1934, covering 20 out of the 26 weeks of these 2 half years. These data are summarized in table 31.

TABLE 31.—*Employment and pay rolls for 13 domestic companies producing earthenware (semivitreous china), first 20 weeks of 1933 and 1934*

	6 large and medium-sized companies	7 small companies	Total 13 companies
Employment (number):			
1933	4,665	1,330	5,995
1934	7,499	1,727	9,226
Pay rolls (average amount per week):			
1933	$76,744	$19,515	$96,260
1934	$137,888	$32,306	$170,195
Average earnings per person per week:			
1933	$16.45	$14.68	$16.05
1934	$18.39	$18.70	$18.45
Percentage increase in—			
Employment	61	30	54
Pay rolls	80	66	77
Weekly earnings per person	12	27	15

This table shows that the number employed by these 13 companies increased 54 percent and the amount of their pay roll 77 percent between the first 20 weeks of 1933 and the first 20 weeks of 1934. The average earnings per person per week rose from $16.05 to $18.45, or by 15 percent. The number employed and the total amount of pay roll showed greater percentage increases for the 6 large than for the 7 small companies (both considered as groups). On the other hand, the increase in average earnings per person per week was much more conspicuous for the smaller companies; presumably a larger proportion of the wage earners received in 1933 pay below the minima fixed by the code and the union agreement, although the difference between the two groups of companies in percentage increase of weekly earnings may have been due in part to difference as regards the actual average working hours per week before the code went into effect.

Share of labor in value of product

The relation of the changes in the expenditure of the domestic producers of earthenware for labor to the changes in the expenditure for other purposes has already been discussed. (See p. 69.) Reference has also been made to the changes in the ratio of pay-roll expenditure to sales value of production. (See p. 74.) It will be recalled that for the 12 manufacturers of earthenware for which (approximately) comparable data are available, pay roll represented

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about 45½ percent of the sales value of production in the first half of 1933, about 49½ percent in the second half of that year, and 50 percent in the first half of 1934. The increase in the proportion of the sales value of product going to labor in the second half of 1933 was not due to higher rates of pay for either piecework or timework, but chiefly to the fact that the marked increase in the volume of output required increase in the amount of labor employed without corresponding increase in other elements of expenditure. The effect of the increases in rates of pay prescribed by the code and the union agreement is reflected in the slight increase in the share of labor in the total sales value of product for the first half of 1934 as compared with the last half of 1933; that this increase in its share was not greater results from increases in expenditures for the important items of costs of materials and fuel, which increases may have been due in considerable part to the operation of other industries under codes.

FACTORS OTHER THAN IMPORTS AFFECTING THE POTTERY SITUATION

Aside from the competition of imports, certain recent tendencies within the United States itself have affected the prosperity of the household table and kitchen pottery industry, particularly some of the individual concerns in that industry.

Competition of pressed glass tableware

The sales of household table pottery, both of domestic and of foreign origin, in the United States have been appreciably affected in the last few years by the rapidly increasing sale of articles for the same use made of pressed glass. In particular there has been a great increase in the sale of pressed glass cups, saucers, and plates. These are produced in the domestic glass industry by automatic machinery at a much lower unit cost than corresponding articles of pottery. These relatively cheap glass articles are handled in great quantities by the 5- and 10-cent stores and in the trade of these stores the glass has to a considerable extent displaced the inexpensive grades of corresponding pottery articles. This situation will probably continue unless there is a material shift toward pottery articles in the preference of consumers. Information obtained from producers of glass indicates that the sales (factory value) of glass cups, saucers, and plates made by automatic machinery averaged about $4,000,000 annually during the period 1929–1933, with an increasing tendency in the course of that period.

Reduction in size of dinner sets

It has been seen (p. 47) that whereas a large proportion of the dinner sets imported consists of sets containing a large number of pieces (especially the sets of 93 or more pieces), the dominant size of the sets sold by the domestic pottery industry is much smaller. There has been in recent years an increasing tendency in the direction of sets of smaller size. The 32-piece set, which is particularly important in present domestic sales, affords a limited service for 6 persons. The vogue for such small sets seems to have resulted partly from the business depression, consumers seeking the lowest possible price, and partly from the smaller living quarters of many American families. Department stores have been active in pushing the 32-piece and other small sets, on which the turnover has been quicker than on larger sets.

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Those domestic producers who have specialized in selling to the 5-and-10-cent store trade have probably gained by the vogue of 32-piece and other small dinner sets. The additional pieces frequently necessary to supplement these small sets are sold largely through these 5-and 10-cent stores. On the other hand, those domestic companies which do not sell to that class of stores have suffered from the popularity of the small sets.

Maladjustments of costs and prices

Prior to July 1933 many domestic manufacturers of household pottery had no adequate system of cost accounting. Its introduction since that time, as the result of the code in the industry, has confirmed the impression, already prevailing in the trade, that many producers have priced certain lines too high and others too low in relation to costs of production. For example, the large dinner sets, services for 12 persons, were in general priced higher in proportion to cost than the smaller dinner sets, especially those of 32 pieces. The result of these maladjustments was that while substantial profits were made on some articles there were substantial losses on others. The general use of cost-accounting methods will presumably gradually bring about a correction of these maladjustments.

Differences in efficiency of producers

The data already presented regarding costs and profits of different individual concerns in the pottery industry indicate clearly marked differences in the efficiency of their production methods as well as in their success in marketing the product. Different concerns vary widely as regards the extent to which mechanization has been introduced. Some of the larger plants have almost completely mechanized their principal operations, whereas some of the small plants have only a minimum of modern mechanical equipment.

The most outstanding mechanical development in the industry in the last 10 years has been the use of continuous tunnel kilns in place of the old intermittent beehive kilns. For a company having a sufficient volume of business and utilizing the tunnel kilns to approximately their full capacity, this installation serves materially to reduce costs. Some concerns which have introduced tunnel kilns, however, have found them of little or no advantage, since the installations could not be nicely adjusted to the volume of output which they were able to market.

Another important device for reducing costs has been the introduction of "paced" conveyor systems whereby lost motion of workers is largely eliminated, operations simplified and standardized, and the work of the different employees geared to a uniform speed. Here again the extent to which the use of conveyor systems reduces costs depends on the size and the steadiness of the business of the concern.

Other mechanical improvements are being gradually introduced into the industry. There is growing use of decalcomania machines, a special form of circular conveyor for decorating purposes, and a trend toward firing without saggars, as well as toward the use of more durable and efficient saggars. Several companies now accomplish glazing by a spraying process, and it is reported that automatic or semiautomatic dipping machines are being developed. Experiments have been made with jiggering machines, but so far these have not been considered entirely practicable.

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It may be noted that introducing mechanical devices often involves difficult adjustments in the complicated wage scales of the pottery industry.

Development of specialty merchandise

A number of concerns making pottery, including some of relatively small size, have added to their volume of sales and their profits by successfully pushing certain specialty items. There has been in the last 2 or 3 years a marked development of this sort in kitchenware. The producer who is able to introduce some article of table or kitchen ware which particularly appeals to the taste, or to the conceptions of convenience, of consumers largely escapes pressure of competition, both domestic and foreign.

DOMESTIC EXPORTS

Domestic exports of earthenware and china household table and kitchen articles are not separately reported in official statistics, but it is known that they represent a negligible proportion of domestic production. A statistical classification is provided for exports of china and porcelain table, toilet, and kitchen articles; the annual amount reported thereunder is relatively small. An examination of a number of export declarations covering shipments from the port of New York indicated that a large portion of the exports reported under that classification consisted of various types of pottery other than table and kitchen articles.

Information obtained direct from producers of earthenware household table and kitchen articles indicates that they occasionally export small amounts; exports of such articles to Canada amount to about $3,000 and those to Puerto Rico to about $1,000 annually.

SALES CHANNELS OF DOMESTIC PRODUCERS

In the course of the Commission's investigation of domestic sales, attention was directed to sales channels with the results shown in the following table.

A number of producers did not keep their sales records by account name and it was possible to tabulate only approximately 75 percent of the sales of the industry in terms of sales channels. The data available, however, appear to be fairly representative for the industry from 1932 on. These indicate that chain stores constitute the principal outlet, taking about 44 percent of the decorated ware in 1932 in terms of both quantity and value and in the first half of 1934 taking 39 percent in quantity and 36 percent in value. Department stores constitute the second most important outlet, taking 32 percent of the decorated ware in quantity and 36 percent in value in 1932 and 34 percent in quantity and 40 percent in value in 1934.

Premium accounts are also an outlet of importance, taking ordinarily about 15 percent of the ware in quantity and value, but in the second half of 1933 reaching the high level of 23 percent in quantity and 18 percent in value.

Jobbers provide the other outlet of consequence, taking from 8 to 11 percent of the ware in quantity and from 7 to 10 percent in value.

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TABLE 32.—*Sales of domestic producers of earthenware, by sales channels, in specified periods of 1932, 1933, and 1934*

DECORATED ARTICLES

Sales channel	1932		1933 (first half)	
	Quantity	Value	Quantity	Value
	Dozens		*Dozens*	
Department stores	3,070,806	$3,071,818	1,941,952	$1,705,344
Jobbers	776,974	597,543	546,425	372,224
Chain stores	4,157,112	3,803,181	2,053,818	1,624,071
Theaters' premium	249,892	336,814	90,458	106,465
Other premium	1,276,924	793,432	708,514	418,769
Total analyzed by sales channels	9,531,708	8,602,788	5,341,167	4,228,873
Total of companies visited	10,200,294	9,434,912	5,905,061	4,796,812
Total of industry	12,883,763	12,396,807	6,639,728	5,590,086
	Percent of total			
Department stores	32.2	35.7	36.4	40.3
Jobbers	8.2	6.9	10.2	8.8
Chain stores	43.6	44.3	38.5	38.4
Theaters' premium	2.6	3.9	1.7	2.6
Other premium	13.4	9.2	13.2	9.9
Total analyzed by sales channels	100.0	100.0	100.0	100.0
	Ratio of analyzed to visited and to total industry			
Total of companies visited	93.4	91.2	90.5	88.2
Total of industry	74.0	69.4	80.4	75.6

Sales channel	1933 (second half)		1934 (first half)[1]	
	Quantity	Value	Quantity	Value
	Dozens		*Dozens*	
Department stores	2,188,972	$2,122,755	1,749,641	$1,895,274
Jobbers	750,401	507,850	510,687	457,873
Chain stores	2,341,665	1,957,175	1,988,124	1,725,121
Theaters' premium	99,800	120,807	184,150	224,857
Other premium	1,491,718	912,592	718,376	482,131
Total analyzed by sales channels	6,872,556	5,621,179	5,150,978	4,785,256
Total of companies visited	7,647,093	6,466,220	5,866,400	5,591,891
Total of industry	8,862,759	7,877,743	7,943,202	8,063,323
	Percent of total			
Department stores	31.8	37.8	34.0	39.6
Jobbers	10.9	9.0	9.9	9.6
Chain stores	34.1	34.8	38.6	36.1
Theaters' premium	1.5	2.1	3.6	4.7
Other premium	21.7	16.3	13.9	10.0
Total analyzed by sales channels	100.0	100.0	100.0	100.0
	Ratio of analyzed to visited and to total industry			
Total of companies visited	89.9	86.9	87.8	85.6
Total of industry	77.5	71.4	64.8	59.3

[1] Does not include 1 company which appears in 1933 (second half). Department stores are a larger outlet for this company than are chain stores.

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APPENDIX

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TABLE 33.—*Earthenware and stoneware household table and kitchen articles (detail of table 5)*

[Summary of imports for consumption, 1928–34]

Calendar year	Rate of duty	Quantity [1]	Value	Unit value	Computed duty	Actual or computed ad valorem rate
		Dozens				*Percent*
Not decorated, colored, etc.:						
1928	45 percent	578,521	$335,329	$0.58	$150,898	45.0
1929	do	478,157	284,028	.59	127,813	45.0
1930:						
Jan. 1–June 17	do	139,805	83,158	.59	37,421	45.0
June 18–Dec. 31	45 percent and 10 cents per dozen pieces.	53,069	42,567	.80	24,462	57.5
		192,874	125,725	.65	61,883	49.2
1931	do	144,796	76,027	.52	48,692	64.0
1932	do	198,139	58,514	.30	46,145	78.9
1933	do	350,164	128,969	.37	93,052	72.2
1934	do	423,654	165,101	.39	116,661	70.7
Decorated, colored, etc.:						
1928	50 percent	3,971,108	4,346,777	1.09	2,173,389	50.0
1929	do	4,644,790	4,987,020	1.07	2,493,510	50.0
1930:						
Jan. 1–June 17	do	2,224,637	2,349,199	1.06	1,174,599	50.0
June 18–Dec. 31	50 percent and 10 cents per dozen pieces.	1,590,593	1,657,624	1.04	987,871	60.0
		3,815,230	4,006,823	1.05	2,162,470	54.0
1931	do	2,291,262	2,183,429	.95	1,320,841	60.5
1932	do	2,123,039	1,261,624	.59	843,116	66.8
1933	do	2,915,613	1,655,543	.57	1,119,333	67.6
1934	do	3,518,614	2,314,063	.66	1,508,893	65.2

[1] Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in methods of counting number of pieces. For this reason also the average unit values for the two periods are not comparable.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

TABLE 34.—*China and porcelain household table and kitchen articles (detail of table 5)*

[Summary of imports for consumption, 1928–34]

Calendar year	Rate of duty	Quantity [1]	Value	Unit value	Computed duty	Computed ad valorem rate
		Dozens				*Percent*
Not decorated, colored, etc.:						
1928	50 or 60 percent	542,663	$326,711	$0.60	$195,505	59.8
1929	do	546,680	297,838	.54	178,078	59.8
1930:						
Jan. 1–June 17	do	240,123	139,583	.58	83,695	60.0
June 18–Dec. 31	60 percent and 10 cents per dozen separate pieces.	138,868	84,914	.61	64,835	76.4
		378,991	224,497	.59	148,530	66.2
1931	do	301,781	122,160	.40	103,474	84.7
1932	do	320,950	65,964	.21	71,673	108.7
1933	do	422,219	76,288	.18	87,995	115.3
1934	do	394,722	102,523	.26	100,986	98.5
Decorated, colored, etc.:						
1928	55 or 70 percent	8,477,199	8,304,839	.98	5,698,323	68.6
1929	do	8,208,636	8,278,951	1.01	5,673,159	68.5
1930:						
Jan. 1–June 17	do	3,683,337	3,735,556	1.01	2,558,312	68.5
June 18–Dec. 31	70 percent and 10 cents per dozen separate pieces.	2,286,893	2,530,109	1.11	1,999,766	79.0
		5,970,230	6,265,665	1.05	4,558,078	72.7
1931	do	4,385,208	3,141,426	.72	2,637,519	84.0
1932	do	4,121,499	1,862,485	.45	1,715,889	92.1
1933	do	5,104,979	2,192,765	.43	2,045,433	93.3
1934	do	5,303,461	2,934,476	.55	2,584,479	88.1

[1] Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in methods of counting number of pieces. For this reason also the average unit values for the two periods are not comparable.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

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TABLE 35.—*Earthenware and stoneware household table and kitchen articles, not decorated, etc. (detail of table 6)*

[Imports for consumption, from principal sources, 1929–34]

	1929	1930	1931	1932	1933	1934
Quantity (dozens):[1]						
Japan	29,162	18,432	17,078	116,179	232,060	345,732
United Kingdom	94,067	51,885	36,713	30,156	53,150	29,552
Germany	137,161	85,999	51,706	40,348	56,986	35,310
Czechoslovakia	19,680	12,865	37,121	7,530	1,595	2,659
France	16,951	1,188	335	1,115	2,414	1,717
All other countries	181,136	22,505	1,843	2,811	3,959	8,654
Total	478,157	192,874	144,796	198,139	350,164	423,654
Value:						
Japan	$11,657	$6,853	$3,470	$11,410	$30,192	$81,800
United Kingdom	109,289	63,848	44,094	29,157	58,621	40,217
Germany	71,374	36,312	16,128	12,879	33,627	30,033
Czechoslovakia	8,233	6,266	10,477	2,280	573	3,211
France	7,185	1,403	545	1,742	3,315	3,607
All other countries	76,290	11,043	1,313	1,046	2,641	6,233
Total	284,028	125,725	76,027	58,514	128,969	165,101
Unit value:						
Japan	$0.40	$0.37	$0.20	$0.10	$0.13	$0.24
United Kingdom	1.16	1.23	1.20	.97	1.10	1.36
Germany	.52	.42	.31	.32	.59	.85
Czechoslovakia	.42	.49	.28	.30	.36	1.19
France	.42	1.18	1.63	1.56	1.37	2.10
All other countries	.42	.49	.71	.37	.67	.72
Average	.59	.65	.52	.30	.37	.39
Percent of total quantity:						
Japan	6.1	9.6	11.8	58.6	66.3	81.6
United Kingdom	19.7	26.9	25.4	15.2	15.2	7.0
Germany	28.7	44.6	35.7	20.4	16.3	8.3
Czechoslovakia	4.1	6.7	25.6	3.8	.4	.6
France	3.5	.6	.2	.6	.7	.4
All other countries	37.9	11.6	1.3	1.4	1.1	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percent of total value:						
Japan	4.1	5.4	4.6	19.5	23.4	49.5
United Kingdom	38.5	50.8	58.0	49.8	45.5	24.4
Germany	25.1	28.9	21.2	22.0	26.1	18.2
Czechoslovakia	2.9	5.0	13.8	3.9	.4	1.9
France	2.5	1.1	.7	3.0	2.6	2.2
All other countries	26.9	8.8	1.7	1.8	2.0	3.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

[1] Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in methods of counting number of pieces. For this reason also the average unit values for the 2 periods are not comparable.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

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TABLE 36.—*Earthenware and stoneware household table and kitchen articles, decorated, etc. (detail of table 6)*

[Imports for consumption, from principal sources, 1929–34]

	1929	1930	1931	1932	1933	1934
Quantity (dozens):[1]						
Japan	1,509,417	1,562,024	1,021,695	1,121,094	2,006,874	2,667,387
United Kingdom	1,349,985	1,060,433	821,095	698,985	699,953	690,872
Germany	845,369	654,326	247,786	160,042	86,606	43,095
Czechoslovakia	280,469	230,239	61,239	37,955	23,934	13,616
France	80,687	50,643	16,004	9,780	8,502	13,126
All other countries	578,863	257,565	123,443	95,183	89,744	90,518
Total	4,644,790	3,815,230	2,291,262	2,123,039	2,915,613	3,518,614
Value:						
Japan	$899,515	$991,079	$526,417	$302,262	$619,289	$1,042,980
United Kingdom	2,156,982	1,720,230	1,150,609	666,107	747,807	1,001,456
Germany	912,725	668,664	223,701	124,217	114,828	59,046
Czechoslovakia	257,442	157,638	43,709	20,055	17,811	17,746
France	141,038	88,193	33,984	16,153	16,988	31,927
All other countries	619,318	381,019	205,009	132,830	138,820	160,908
Total	4,987,020	4,006,823	2,183,429	1,261,624	1,655,543	2,314,063
Unit value:						
Japan	$0.60	$0.63	$0.52	$0.27	$0.31	$0.39
United Kingdom	1.60	1.62	1.40	.95	1.07	1.45
Germany	1.08	1.02	.90	.78	1.33	1.37
Czechoslovakia	.92	.68	.71	.53	.74	1.30
France	1.75	1.74	2.12	1.65	2.00	2.43
All other countries	1.07	1.48	1.66	1.40	1.55	1.78
Average	1.07	1.05	.95	.59	.57	.66
Percent of total quantity:						
Japan	32.5	40.9	44.6	52.8	68.8	75.8
United Kingdom	29.1	27.8	35.8	32.9	24.0	19.6
Germany	18.2	17.2	10.8	7.5	3.0	1.2
Czechoslovakia	6.0	6.0	2.7	1.8	.8	.4
France	1.7	1.3	.7	.5	.3	.4
All other countries	12.5	6.8	5.4	4.5	3.1	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percent of total value:						
Japan	18.0	24.8	24.1	24.0	37.4	45.1
United Kingdom	43.3	42.9	52.7	52.8	45.2	43.3
Germany	18.3	16.7	10.2	9.8	6.9	2.5
Czechoslovakia	5.2	3.9	2.0	1.6	1.1	.8
France	2.8	2.2	1.6	1.3	1.0	1.4
All other countries	12.4	9.5	9.4	10.5	8.4	6.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

[1]Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in methods of counting number of pieces. For this reason also the average unit values for the 2 periods are not comparable.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

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TABLE 37.—*China and porcelain household table and kitchen articles, not decorated, etc. (detail of table 6)*

[Imports for consumption, from principal sources, 1929–34]

	1929	1930	1931	1932	1933	1934
Quantity (dozens): [1]						
Japan	369,426	232,760	215,950	277,944	390,327	358,257
United Kingdom	6,215	366	63	491	590	741
Germany	137,803	120,388	73,788	37,978	25,735	22,597
Czechoslovakia	12,082	6,289	6,272	1,261	1,036	5,101
France	9,608	5,522	1,192	976	929	2,153
All other countries	11,546	13,666	4,516	2,300	3,602	5,873
Total	546,680	378,991	301,781	320,950	422,219	394,722
Value:						
Japan	$118,384	$79,120	$42,371	$25,311	$38,871	$50,414
United Kingdom	6,245	2,118	205	2,007	3,654	4,177
Germany	142,948	126,271	71,460	35,592	29,467	31,862
Czechoslovakia	9,614	3,913	4,610	912	763	8,611
France	13,028	6,848	2,477	1,206	1,780	4,822
All other countries	7,619	6,227	1,037	936	1,753	2,657
Total	297,838	224,497	122,160	65,964	76,288	102,523
Unit value:						
Japan	$0.32	$0.34	$0.20	$0.09	$0.10	$0.14
United Kingdom	1.00	5.79	3.25	4.09	6.19	5.64
Germany	1.04	1.05	.97	.94	1.14	1.41
Czechoslovakia	.80	.62	.74	.72	.74	1.69
France	1.36	1.24	2.08	1.24	1.92	2.24
All other countries	.66	.46	.23	.41	.49	.45
Average	.54	.59	.40	.21	.18	.26
Percent of total quantity:						
Japan	67.6	61.4	71.6	86.6	92.4	90.8
United Kingdom	1.1	.1		.2	.1	.2
Germany	25.2	31.8	24.4	11.8	6.1	5.7
Czechoslovakia	2.2	1.7	2.1	.4	.3	1.3
France	1.8	1.4	.4	.3	.2	.5
All other countries	2.1	3.6	1.5	.7	.9	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percent of total value:						
Japan	39.7	35.2	34.7	38.4	51.0	49.2
United Kingdom	2.1	.9	.2	3.0	4.8	4.1
Germany	48.0	56.3	58.5	54.0	38.6	31.1
Czechoslovakia	3.2	1.7	3.8	1.4	1.0	8.4
France	4.4	3.1	2.0	1.8	2.3	4.7
All other countries	2.6	2.8	.8	1.4	2.3	2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

[1] Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in methods of counting number of pieces. For this reason also the average unit values for the 2 periods are not comparable.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

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TABLE 38.—*China and porcelain household table and kitchen articles, decorated, etc. (detail of table 6)*

[Imports for consumption, from principal sources, 1929-34]

	1929	1930	1931	1932	1933	1934
Quantity (dozens):[1]						
Japan	5,258,042	3,873,322	3,358,205	3,420,009	4,513,003	4,844,484
United Kingdom	90,159	60,576	36,083	20,082	20,231	21,733
Germany	1,963,234	1,424,689	684,214	433,078	414,852	279,339
Czechoslovakia	438,849	251,762	160,222	171,714	101,025	91,903
France	302,254	206,439	58,250	31,540	16,996	12,392
All other countries	156,098	153,442	88,234	45,076	38,872	53,610
Total	8,208,636	5,970,230	4,385,208	4,121,499	5,104,979	5,303,461
Value:						
Japan	$3,457,281	$2,576,882	$1,418,172	$806,126	$1,215,892	$2,004,420
United Kingdom	814,043	672,428	288,075	107,754	143,324	186,945
Germany	2,473,924	1,935,533	968,076	628,546	618,871	508,921
Czechoslovakia	611,822	372,615	215,414	197,211	130,720	132,393
France	683,128	506,127	171,931	85,312	50,331	41,605
All other countries	238,753	202,080	79,758	37,536	33,627	60,192
Total	8,278,951	6,265,665	3,141,426	1,862,485	2,192,765	2,934,476
Unit value:						
Japan	$0.66	$0.67	$0.42	$0.24	$0.27	$0.41
United Kingdom	9.03	11.10	7.98	5.37	7.08	8.60
Germany	1.26	1.36	1.41	1.45	1.49	1.82
Czechoslovakia	1.39	1.48	1.34	1.15	1.29	1.44
France	2.26	2.45	2.95	2.70	2.96	3.36
All other countries	1.53	1.32	.90	.83	.86	1.12
Average	1.01	1.05	.72	.45	.43	.55
Percent of total quantity:						
Japan	64.1	64.9	76.6	83.0	88.4	91.4
United Kingdom	1.1	1.0	.8	.5	.4	.4
Germany	23.9	23.9	15.6	10.5	8.1	5.3
Czechoslovakia	5.3	4.2	3.7	4.1	2.0	1.7
France	3.7	3.4	1.3	.8	.3	.2
All other countries	1.9	2.6	2.0	1.1	.8	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percent of total value:						
Japan	41.8	41.1	45.1	43.3	55.5	68.3
United Kingdom	9.8	10.7	9.2	5.8	6.5	6.4
Germany	29.9	30.9	30.8	33.7	28.2	17.3
Czechoslovakia	7.4	6.0	6.9	10.6	6.0	4.5
France	8.2	8.1	5.5	4.6	2.3	1.4
All other countries	2.9	3.2	2.5	2.0	1.5	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

[1] Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in methods of counting number of pieces. For this reason also the average unit values for the 2 periods are not comparable.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

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TABLE 39.—*Earthenware and stoneware household table and kitchen articles, not decorated and decorated (detail of table 7)*

[Summary of imports for consumption (quantity), from principal sources, 1929-34]

	Quantity (dozens) [1]						
	Czechoslovakia	France	Germany	United Kingdom	Japan	All other countries	Total
1929							
Not decorated, colored, etc.	19,680	16,951	137,161	94,067	29,162	181,136	478,157
Decorated, colored, etc.	280,469	80,687	845,369	1,349,985	1,509,417	578,863	4,644,790
Total	300,149	97,638	982,530	1,444,052	1,538,579	759,999	5,122,947
1930							
Not decorated, colored, etc.	12,865	1,188	85,999	51,885	18,432	22,505	192,874
Decorated, colored, etc.	230,239	50,643	654,326	1,060,433	1,562,024	257,565	3,815,230
Total	243,104	51,831	740,325	1,112,318	1,580,456	280,070	4,008,104
1931							
Not decorated, colored, etc.	37,121	335	51,706	36,713	17,078	1,843	144,796
Decorated, colored, etc.	61,239	16,004	247,786	821,095	1,021,695	123,443	2,291,262
Total	98,360	16,339	299,492	857,808	1,038,773	125,286	2,436,058
1932							
Not decorated, colored, etc.	7,530	1,115	40,348	30,156	116,179	2,811	198,139
Decorated, colored, etc.	37,955	9,780	160,042	698,985	1,121,094	95,183	2,123,039
Total	45,485	10,895	200,390	729,141	1,237,273	97,994	2,321,178
1933							
Not decorated, colored, etc.	1,595	2,414	56,986	53,150	232,060	3,959	350,164
Decorated, colored, etc.	23,934	8,502	86,606	699,953	2,006,874	89,744	2,915,613
Total	25,529	10,916	143,592	753,103	2,238,934	93,703	3,265,777
1934							
Not decorated, colored, etc.	2,689	1,717	35,310	29,552	345,732	8,654	423,654
Decorated, colored, etc.	13,616	13,126	43,095	690,872	2,667,387	90,518	3,518,614
Total	16,305	14,843	78,405	720,424	3,013,119	99,172	3,942,268

[1] Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in methods of counting number of pieces.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

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TABLE 40.—*China and porcelain household table and kitchen articles, not decorated and decorated (detail of table 7)*

[Summary of imports for consumption (quantity), from principal sources, 1929–34]

	Quantity (dozens) [1]						
	Czechoslovakia	France	Germany	United Kingdom	Japan	All other countries	Total
1929							
Not decorated, colored, etc.	12,082	9,608	137,803	6,215	369,426	11,546	546,680
Decorated, colored, etc.	438,849	302,254	1,963,234	90,159	5,258,042	156,098	8,208,636
Total	450,931	311,862	2,101,037	96,374	5,627,468	167,644	8,755,316
1930							
Not decorated, colored, etc.	6,289	5,522	120,388	366	232,760	13,666	378,991
Decorated, colored, etc.	251,762	206,439	1,424,689	60,576	3,873,322	153,442	5,970,230
Total	258,051	211,961	1,545,077	60,942	4,106,082	167,108	6,349,221
1931							
Not decorated, colored, etc.	6,272	1,192	73,788	63	215,950	4,516	301,781
Decorated, colored, etc.	160,222	58,250	684,214	36,083	3,358,205	88,234	4,385,208
Total	166,494	59,442	758,002	36,146	3,574,155	92,750	4,686,989
1932							
Not decorated, colored, etc.	1,261	976	37,978	491	277,944	2,300	320,950
Decorated, colored, etc.	171,714	31,540	433,078	20,082	3,420,009	45,076	4,121,499
Total	172,975	32,516	471,056	20,573	3,697,953	47,376	4,442,449
1933							
Not decorated, colored, etc.	1,036	929	25,735	590	390,327	3,602	422,219
Decorated, colored, etc.	101,025	16,996	414,852	20,231	4,513,003	38,872	5,104,979
Total	102,061	17,925	440,587	20,821	4,903,330	42,474	5,527,198
1934							
Not decorated, colored, etc.	5,101	2,153	22,597	741	358,257	5,873	394,722
Decorated, colored, etc.	91,903	12,392	279,339	21,733	4,844,484	53,610	5,303,461
Total	97,004	14,545	301,936	22,474	5,202,741	59,483	5,698,183

[1] Figures of quantity under the act of 1922 not comparable with those under the act of 1930 because of difference in methods of counting number of pieces.

Source: Bureau of Foreign and Domestic Commerce, Department of Commerce.

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TABLE 41.—*Earthenware and stoneware household table and kitchen articles, not decorated, colored, etc.: Monthly imports for consumption from Japan, and from all countries, 1933, 1934, and 1935 (2 months) (detail of table 8)*

	Quantity (dozen pieces)			Value		
	Japan	All other	Total	Japan	All other	Total
1933						
January	26,833	11,719	38,552	$2,299	$4,960	$7,259
February	18,284	6,849	25,133	1,588	3,773	5,361
March	22,180	7,849	30,029	2,128	6,054	8,182
April	23,819	9,030	32,849	2,751	5,648	8,399
May	20,412	8,653	29,065	2,992	6,628	9,620
June	26,155	7,981	34,136	2,975	4,603	7,578
July	16,655	8,528	25,183	2,603	6,259	8,862
August	10,178	10,233	20,411	1,656	9,289	10,945
September	15,042	5,876	20,918	2,498	10,047	12,545
October	18,529	9,611	28,140	2,931	10,715	13,646
November	14,163	20,520	34,683	2,570	20,452	23,022
December	19,810	11,255	31,065	3,201	10,349	13,550
Total, 12 months	232,060	118,104	350,164	30,192	98,777	128,969
1934						
January	48,889	7,157	56,046	7,938	5,847	13,785
February	23,399	7,525	30,924	4,553	7,339	11,892
March	10,562	10,996	21,558	2,487	8,387	10,874
April	17,994	7,506	25,500	4,110	4,537	8,647
May	28,477	5,381	33,858	4,971	5,892	10,863
June	33,852	4,205	38,057	7,490	5,432	12,922
July	27,556	4,040	31,596	7,428	5,575	13,003
August	25,285	4,184	29,469	6,843	6,041	12,884
September	53,983	5,880	59,863	13,808	7,952	21,760
October	23,506	8,487	31,993	7,668	10,981	18,649
November	29,472	9,081	38,553	7,427	9,634	17,061
December	22,757	3,480	26,237	7,077	5,684	12,761
Total, 12 months	345,732	77,922	423,654	81,800	83,301	165,101
1935						
January	28,847	4,786	33,633	9,155	6,452	15,607
February	22,895	4,236	27,131	6,483	5,258	11,741

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TABLE 42.—*Earthenware and stoneware household table and kitchen articles, decorated, colored, etc.: Monthly imports for consumption from Japan, and from all countries, 1933, 1934, and 1935 (2 months) (detail of table 8)*

	Quantity (dozen pieces)			Value		
	Japan	All other	Total	Japan	All other	Total
1933						
January	107,517	70,497	178,014	$24,179	$63,467	$87,646
February	74,297	109,006	183,303	16,701	88,568	105,269
March	120,868	88,949	209,817	27,977	76,108	104,085
April	159,175	66,737	225,912	40,640	60,196	100,836
May	165,806	73,224	239,030	44,486	72,311	116,797
June	166,523	57,442	223,965	45,525	62,922	108,447
July	188,058	73,175	261,233	55,302	81,541	136,843
August	171,083	87,976	259,059	53,400	101,116	154,516
September	221,646	63,528	285,174	78,647	92,279	170,926
October	263,138	76,237	339,375	99,056	113,503	212,559
November	209,620	82,988	292,608	78,083	125,260	203,343
December	159,143	58,980	218,123	55,293	98,983	154,276
Total 12 months	2,006,874	908,739	2,915,613	619,289	1,036,254	1,655,543
1934						
January	191,845	61,987	253,832	70,966	91,064	162,030
February	136,216	89,071	225,287	54,226	126,472	180,698
March	172,626	77,289	249,915	65,203	104,317	169,520
April	185,634	64,260	249,894	71,197	99,399	170,596
May	181,907	73,152	255,059	74,781	117,160	191,941
June	204,488	74,731	279,219	73,764	110,101	183,865
July	225,951	63,942	289,893	86,372	101,244	187,616
August	240,990	66,865	307,855	91,496	100,816	192,312
September	299,311	64,891	364,202	123,176	101,615	224,791
October	342,822	78,410	421,232	139,156	114,255	253,411
November	304,960	84,989	389,949	121,619	126,612	248,232
December	180,637	51,640	232,277	71,024	78,028	149,051
Total 12 months	2,667,387	851,227	3,518,614	1,042,980	1,271,083	2,314,063
1935						
January	218,859	70,468	289,327	82,366	95,919	178,285
February	150,225	65,256	215,481	57,546	88,826	146,372

TABLE 43.—*China and porcelain household table and kitchen articles, not decorated, colored, etc.: Monthly imports for consumption from Japan and from all countries, 1933, 1934, and 1935 (2 months) (detail of table 8)*

	Quantity (dozen pieces)			Value		
	Japan	All other	Total	Japan	All other	Total
1933						
January	39,100	2,327	41,427	$2,585	$2,975	$5,560
February	24,062	1,585	25,647	1,656	2,229	3,885
March	20,775	3,264	24,039	1,679	2,994	4,673
April	25,162	2,934	28,096	1,924	2,497	4,421
May	27,265	2,379	29,644	2,580	2,210	4,790
June	22,528	2,828	25,356	3,254	2,847	6,101
July	41,271	1,280	42,551	4,555	2,158	6,713
August	35,205	2,810	38,015	3,971	3,596	7,567
September	20,777	2,101	22,878	2,472	2,283	4,755
October	27,377	3,886	31,263	3,336	5,222	8,558
November	42,102	2,707	44,809	4,179	4,653	8,832
December	64,703	3,791	68,494	6,680	3,753	10,433
Total, 12 months	390,327	31,892	422,219	38,871	37,417	76,288
1934						
January	86,354	3,302	89,656	9,198	5,033	14,231
February	49,845	4,505	54,350	5,809	8,752	14,561
March	24,929	1,535	26,464	3,097	2,563	5,660
April	18,520	3,797	22,317	2,958	4,755	7,713
May	18,143	3,135	21,278	2,964	4,524	7,488
June	24,318	3,456	27,774	3,111	4,170	7,281
July	24,485	2,791	27,276	4,036	4,390	8,426
August	23,568	2,474	26,042	5,009	2,720	7,729
September	23,701	4,027	27,728	3,700	4,731	8,431
October	31,453	1,768	33,221	5,796	2,497	8,293
November	20,973	2,941	23,914	3,252	4,594	7,846
December	11,968	2,734	14,702	1,484	3,380	4,864
Total, 12 months	358,257	36,465	394,722	50,414	52,109	102,523
1935						
January	13,014	1,967	14,981	2,568	3,528	6,096
February	29,918	1,942	31,860	4,266	2,425	6,691

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TABLE 44.—*China and porcelain household table and kitchen articles, decorated, colored, etc.: Monthly imports for consumption from Japan, and from all countries, 1933, 1934, and 1935 (2 months) (detail of table 8)*

	Quantity (dozen pieces)			Value		
	Japan	All other	Total	Japan	All other	Total
1933						
January	386, 535	44, 347	430, 882	$79, 884	$58, 867	$138, 751
February	234, 913	45, 062	279, 975	43, 407	66, 218	109, 625
March	361, 318	59, 340	420, 658	81, 483	85, 229	166, 712
April	349, 032	36, 302	385, 334	69, 494	52, 646	122, 140
May	343, 994	40, 743	384, 737	79, 116	68, 677	147, 793
June	344, 739	41, 713	386, 452	93, 551	64, 465	158, 016
July	395, 004	42, 748	437, 752	99, 590	63, 490	163, 080
August	432, 421	51, 026	483, 447	139, 922	78, 934	218, 856
September	448, 424	61, 139	509, 563	137, 471	106, 872	244, 343
October	523, 723	65, 772	589, 495	168, 592	127, 763	296, 355
November	370, 221	63, 149	433, 370	116, 402	118, 454	234, 856
December	322, 679	40, 635	363, 314	106, 980	85, 258	192, 238
Total, 12 months	4, 513, 003	591, 976	5, 104, 979	1, 215, 892	976, 873	2, 192, 765
1934						
January	473, 071	41, 726	514, 797	168, 949	78, 872	247, 821
February	347, 657	36, 785	384, 442	139, 044	75, 328	214, 372
March	304, 331	44, 320	348, 651	135, 628	102, 589	238, 217
April	302, 728	38, 866	341, 594	135, 479	78, 128	213, 607
May	298, 485	40, 497	338, 982	121, 655	80, 698	202, 353
June	319, 785	41, 445	361, 230	135, 696	81, 303	216, 999
July	450, 779	28, 344	479, 123	185, 890	65, 867	251, 757
August	447, 980	40, 959	488, 939	175, 295	70, 643	245, 938
September	575, 296	39, 349	614, 645	256, 830	73, 902	330, 732
October	511, 584	29, 542	541, 126	230, 356	65, 848	296, 204
November	561, 493	40, 055	601, 548	216, 439	83, 482	299, 921
December	251, 295	37, 089	288, 384	103, 159	73, 396	176, 555
Total, 12 months	4, 844, 484	458, 977	5, 303, 461	2, 004, 420	930, 056	2, 934, 476
1935						
January	236, 876	29, 418	266, 294	105, 045	62, 566	167, 611
February	278, 188	45, 688	323, 876	140, 496	72, 129	212, 625

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TABLE 45.—*Earthenware and stoneware household table and kitchen articles, decorated, colored, etc.: Trend of imports from Japan of specific articles and groups of articles in specified periods; and ratios of imports of such articles and groups in a specified period to imports (1) in 1933 (July–December), and (2) in 1933 (January–June) (detail of table 9)*

Item	1933 (January–June)		1933 (July–December)		1934 (January–June)		Ratio to 1933 (July–December), 100 percent		Ratio to 1933 (January–June), 100 percent			
	Quantity	Value	Quantity	Value	Quantity	Value	1934 (January–June)		1933 (July–December)		1934 (January–June)	
	Dozen pieces		Dozen pieces		Dozen pieces		Dozen pieces	Value	Dozen pieces	Value	Dozen pieces	Value
							Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Pecent*
Dinnerware	3,893	$1,655	4,755	$3,890	26,912	$9,042	566.0	232.4	122.1	235.0	691.3	546.3
Sets	3,893	1,655	4,755	3,890	26,912	9,042	566.0	232.4	122.1	235.0	691.3	546.3
Open stock												
Short-line tableware	481,259	125,636	878,459	317,436	898,045	313,906	102.2	98.9	182.5	252.7	186.6	249.9
Sets	18,444	4,888	77,712	28,287	77,955	31,104	100.3	110.0	421.3	578.7	422.7	636.3
Other	462,815	120,748	800,747	289,149	820,090	282,802	102.4	97.8	173.0	239.5	177.2	234.2
A. D. cups and saucers in pairs	1,382	158	2,020	296	7,336	1,129	363.2	381.4	146.2	187.3	530.8	714.6
A. D. cups only					162	28	(1)	(1)			(2)	(2)
A. D. saucers only					94	13	(1)	(1)			(2)	(2)
Other cups and saucers in pairs	54,958	7,035	184,776	29,287	124,692	22,071	67.5	75.4	336.2	416.3	226.9	313.7
Other cups only	2,132	247	1,454	262	2,208	547	151.9	208.8	68.2	106.1	103.6	221.5
Other saucers only					1,076	191	(1)	(1)			(2)	(2)
Total cups and saucers in pairs	56,340	7,193	186,796	29,583	132,028	23,200	70.7	78.4	331.6	411.3	234.3	322.5
Total cups and saucers	58,472	7,440	188,250	29,845	135,568	23,979	72.0	80.3	321.9	401.1	231.9	322.3
Plates	11,611	2,322	23,241	9,808	65,002	26,716	279.7	272.4	200.2	422.4	559.8	1,150.6
Teapots with covers (2 pieces)	26,530	7,826	145,816	53,952	84,224	38,491	57.8	71.3	549.6	689.4	317.5	491.8
Sugars and creamers (3 pieces)	13,623	2,665	14,730	3,599	22,116	6,266	150.1	174.1	108.1	135.0	162.3	235.1
Mugs and steins	131,395	28,118	94,343	25,378	38,145	13,656	40.4	53.8	71.8	90.3	29.0	48.6
Salts and peppers (2 pieces)	37,214	4,466	1,122	131	168,996	13,182	15,062.0	10,062.6	3.0	2.9	454.1	295.2
Cookie jars with covers (2 pieces)	48,710	19,758	102,324	53,516	28,674	22,939	28.0	42.9	210.1	270.9	58.9	116.1
All other tableware	135,260	48,153	230,921	112,920	277,365	137,573	120.1	121.8	170.7	234.5	205.1	285.7
Total dinnerware and short-line tableware	485,152	127,291	883,214	321,326	924,957	322,948	104.7	100.5	182.0	252.4	190.7	253.7

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Kitchenware	330,953	72,217	327,784	98,455	239,179	87,189	73.0	88.6	90.0	136.3	72.3	120.7
Cereal sets	91,446	16,277	42,279	16,277	35,476	12,417	83.9	76.3	46.2	100.0	38.8	76.3
Bowls	13,370	4,800	67,764	17,145	28,873	12,646	42.6	73.8	506.8	357.2	216.0	263.5
Ice-box and range sets	108,082	21,508	67,303	22,008	60,512	16,399	89.9	74.5	62.3	102.3	56.0	76.2
Other kitchenware	118,055	29,632	150,438	43,025	114,318	45,727	76.0	106.3	127.4	145.2	96.8	154.3
Total table and kitchen ware	816,105	199,508	1,210,998	419,781	1,164,136	410,137	96.1	97.7	148.4	210.4	142.6	205.6
Summary of cups and saucers and plates (quantity only) included in the above:												
Cups and saucers	69,104	----	225,000	----	179,640	----	79.8	----	325.6	----	260.0	----
Dinnerware	1,192	----	1,312	----	8,164	----	622.3	----	110.1	----	684.9	----
Parts of sets	1,192	----	1,312	----	8,164	----	622.3	----	110.1	----	684.9	----
Open stock	----	----	----	----	----	----	----	----	----	----	----	----
Short-line tableware	67,912	----	223,688	----	171,476	----	76.7	----	329.4	----	252.5	----
Parts of sets	9,440	----	35,438	----	35,908	----	101.3	----	375.4	----	380.4	----
Other	58,472	----	188,250	----	135,568	----	72.0	----	321.9	----	231.9	----
Plates	17,023	----	47,128	----	95,060	----	201.7	----	276.8	----	558.4	----
Dinnerware	1,501	----	1,968	----	11,619	----	590.4	----	131.1	----	774.1	----
Parts of sets	1,501	----	1,968	----	11,619	----	590.4	----	131.1	----	774.1	----
Open stock	----	----	----	----	----	----	----	----	----	----	----	----
Short-line tableware	15,522	----	45,160	----	83,441	----	184.8	----	290.9	----	537.6	----
Parts of sets	3,911	----	21,919	----	18,439	----	84.1	----	560.4	----	471.5	----
Other	11,611	----	23,241	----	65,002	----	279.7	----	200.2	----	559.8	----

[1] No imports recorded in the second half of 1933.
[2] No imports recorded in the first half of 1933.

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TABLE 46.—*China and porcelain household table and kitchen articles, decorated, colored, etc.: Trend of imports from Japan of specific articles and groups of articles in specified periods; and ratios of imports of such articles and groups in a specified period to imports (1) in 1933 (July–December), and (2) in 1933 (January–June) (detail of table 9)*

Item	1933 (January–June)		1933 (July–December)		1934 (January–June)		Ratio to 1933 (July–December) 100 percent		Ratio to 1933 (January–June) 100 percent			
	Quantity	Value	Quantity	Value	Quantity	Value	1934 (January–June)		1933 (July–December)		1934 (January–June)	
	Dozen pieces		Dozen pieces		Dozen pieces		Dozen pieces	Value	Dozen pieces	Value	Dozen pieces	Value
							Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Dinnerware	338,875	$241,300	421,614	$409,241	524,531	$564,609	124.4	138.0	124.4	169.6	154.8	234.0
Sets	282,270	192,792	357,091	341,120	436,409	477,894	122.2	140.1	126.5	176.9	154.6	247.9
Open stock	56,605	48,508	64,523	68,121	88,122	88,715	136.6	127.3	114.0	140.4	155.7	178.8
Short-line tableware	1,269,765	187,862	1,860,475	338,116	925,168	247,244	49.7	73.1	146.5	180.0	72.9	131.6
Sets	212,756	38,409	386,347	86,981	286,382	83,088	74.1	95.5	181.6	226.5	134.6	216.3
Other	1,057,009	149,453	1,474,128	251,135	638,786	164,156	43.3	65.4	139.5	168.0	60.4	109.8
A. D. cups and saucers in pairs	45,924	3,651	66,444	5,681	79,228	9,349	119.2	164.6	144.7	155.6	172.5	256.1
A. D. cups only	119	29							(1)	(1)	(2)	(2)
A. D. saucers only												
Other cups and saucers in pairs	809,674	91,898	1,138,108	169,578	404,572	85,769	35.5	50.6	140.6	184.5	50.0	93.3
Other cups only	8,681	1,198	22,052	3,793	4,988	1,207	22.6	31.8	254.0	316.6	57.5	100.8
Other saucers only	356	88	262	91	167	93	63.7	102.2	73.6	103.4	46.9	105.7
Total cups and saucers in pairs	855,598	95,549	1,204,552	175,259	483,800	95,118	40.2	54.3	140.8	183.4	56.5	99.5
Total cups and saucers	864,754	96,864	1,226,866	179,143	488,955	96,418	39.9	53.8	141.9	184.9	56.5	99.5
Plates	16,240	4,271	16,247	6,369	20,564	10,118	126.6	158.9	100.0	149.1	126.6	236.9
Teapots with covers (2 pieces)	82,220	23,967	108,220	32,087	67,766	22,261	62.6	69.4	131.6	133.9	82.4	92.9
Sugars and creamers (3 pieces)	7,419	1,630	14,115	2,691	4,845	2,103	34.3	78.1	190.3	165.1	65.3	129.0
Mugs and steins	2,164	1,121	13,061	3,226	8,867	2,527	67.9	78.3	603.6	287.8	409.8	225.4
Salts and peppers (2 pieces)	18,974	2,220	20,066	2,699	6,040	498	30.1	18.5	105.8	121.6	31.8	22.4
Cookie jars with covers (2 pieces)	16,872	7,095	6,764	5,299	4,132	3,560	61.1	67.2	40.1	74.7	24.5	50.2
All other tableware	48,366	12,285	68,789	19,621	37,617	26,671	54.7	135.9	142.2	159.7	77.8	217.1
Total dinnerware and short-line tableware	1,608,640	429,162	2,282,089	747,357	1,449,699	811,853	63.5	108.6	141.9	174.1	90.1	189.2

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Kitchenware	48,849	17,773	57,416	21,600	69,490	24,598	121.0	113.9	117.5	121.5	142.3	138.4
Cereal sets	5,794	1,744	2,419	907	3,454	915	142.8	100.9	41.8	52.0	59.6	52.5
Bowls	17,760	6,891	34,209	10,331	41,145	11,438	120.3	110.7	192.6	149.9	231.7	166.0
Ice-box and range sets	8,232	2,091	3,642	1,446	1,943	954	53.3	66.0	44.2	69.2	23.6	45.6
Other kitchenware	17,063	7,047	17,146	8,916	22,948	11,291	133.8	126.6	100.5	126.5	134.5	160.2
Total table and kitchen ware	1,657,489	446,935	2,339,505	768,957	1,519,189	836,451	64.9	108.8	141.1	172.1	91.7	187.2
Summary of cups and saucers, and plates (quantity only) included in the above:												
Cups and saucers	1,073,238	.....	1,541,440	.....	778,593	.....	50.5	.....	143.6	.....	72.5	.....
Dinnerware	89,398	.....	104,612	.....	130,426	.....	124.7	.....	117.0	.....	145.9	.....
Parts of sets	74,914	.....	91,506	.....	113,244	.....	123.8	.....	122.1	.....	151.2	.....
Open stock	14,484	.....	13,106	.....	17,182	.....	131.1	.....	90.5	.....	118.6	.....
Short-line tableware	983,840	.....	1,436,828	.....	648,167	.....	45.1	.....	146.0	.....	65.9	.....
Parts of sets	119,086	.....	209,962	.....	159,212	.....	75.8	.....	176.3	.....	133.7	.....
Other	864,754	.....	1,226,866	.....	488,955	.....	39.9	.....	141.9	.....	56.5	.....
Plates	215,009	.....	294,569	.....	317,733	.....	107.9	.....	137.0	.....	147.8	.....
Dinnerware	157,383	.....	194,531	.....	239,420	.....	123.1	.....	123.6	.....	152.1	.....
Parts of sets	130,717	.....	162,917	.....	199,729	.....	122.6	.....	124.6	.....	152.8	.....
Open stock	26,666	.....	31,614	.....	39,691	.....	125.5	.....	118.6	.....	148.8	.....
Short-line tableware	57,626	.....	100,038	.....	78,313	.....	78.0	.....	173.6	.....	135.9	.....
Parts of sets	41,386	.....	83,791	.....	57,749	.....	68.9	.....	202.5	.....	139.5	.....
Other	16,240	.....	16,247	.....	20,564	.....	126.6	.....	100.0	.....	126.6	.....

[1] No imports recorded in the second half of 1933.
[2] No imports recorded in the first half of 1934.

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TABLE 47.—*Earthenware and stoneware household table and kitchen articles, decorated or colored: Percentage distribution of imports from Japan according to articles and groups, 1933 and 1934 (6 months) (detail of table 10)*

	1933 (January-June)		1933 (July-December)		1934 (January-June)	
	Quantity	Value	Quantity	Value	Quantity	Value
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Dinnerware	0.5	0.8	0.4	0.9	2.3	2.2
Sets	.5	.8	.4	.9	2.3	2.2
Open stock						
Short-line tableware	58.9	63.0	72.5	75.6	77.1	76.5
Sets	2.2	2.5	6.4	6.7	6.7	7.6
Other	56.7	60.5	66.1	68.9	70.4	68.9
A. D. cups and saucers in pairs	.2	(1)	.2	(1)	.6	.3
A. D. cups only					(1)	(1)
A. D. saucers only					(1)	(1)
Other cups and saucers in pairs	6.7	3.5	15.3	7.0	10.7	5.4
Other cups only	.3	.1	.1	(1)	.2	.1
Other saucers only					(1)	(1)
Total cups and saucers in pairs	6.9	3.6	15.5	7.0	11.3	5.7
Total cups and saucers	7.2	3.7	15.6	7.1	11.6	5.8
Plates	1.4	1.2	1.9	2.3	5.6	6.5
Teapots with covers	3.2	3.9	12.0	12.9	7.2	9.4
Sugars and creamers (sets)	1.7	1.3	1.2	.9	1.9	1.5
Mugs and steins	16.1	14.1	7.8	6.0	3.3	3.3
Salts and peppers	4.5	2.2	(1)	(1)	14.5	3.2
Cookie jars with covers	6.0	9.9	8.4	12.8	2.5	5.6
All other tableware	16.6	24.2	19.1	26.9	23.8	33.6
Total dinnerware and short-line tableware	59.4	63.8	72.9	66.5	79.4	78.7
Kitchenware	40.6	36.2	27.1	23.5	20.6	21.3
Cereal sets	11.2	8.2	3.5	3.9	3.1	3.0
Bowls	1.6	2.4	5.6	4.1	2.5	3.1
Ice-box and range sets	13.3	10.8	5.6	5.2	5.2	4.0
Other kitchenware	14.5	14.8	12.4	10.3	9.8	11.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

[1] Less than 1/10 of 1 percent.

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TABLE 48.—*China and porcelain household table and kitchen articles, decorated or colored: Percentage distribution of imports from Japan according to articles and groups, 1933 and 1934 (6 months) (detail of table 10)*

	1933 (January-June)		1933 (July-December)		1934 (January-June)	
	Quantity	Value	Quantity	Value	Quantity	Value
Dinnerware	*Percent* 20.4	*Percent* 54.0	*Percent* 18.0	*Percent* 53.2	*Percent* 34.5	*Percent* 67.5
Sets	17.0	43.1	15.3	44.4	28.7	57.1
Open stock	3.4	10.9	2.7	8.8	5.8	10.4
Short-line tableware	76.6	42.0	79.5	44.0	60.9	29.6
Sets	12.8	8.6	16.5	11.3	18.9	10.0
Other	63.8	33.4	63.0	32.7	42.0	19.6
A. D. cups and saucers in pairs	2.8	.8	2.8	.7	5.2	1.1
A. D. cups only	(1)	(1)				
A. D. saucers only						
Other cups and saucers in pairs	48.8	20.6	48.7	22.1	26.7	10.3
Other cups only	.5	.3	.9	.5	.3	.1
Other saucers only	(1)	(1)	(1)	(1)	(1)	(1)
Total cups and saucers in pairs	51.6	21.4	51.5	22.8	31.9	11.4
Total cups and saucers	52.1	21.7	52.4	23.3	32.2	11.5
Plates	1.0	.9	.7	.8	1.3	1.2
Teapots with covers	5.0	5.3	4.6	4.2	4.4	2.7
Sugars and creamers (sets)	.5	.4	.6	.4	.3	.2
Mugs and steins	.1	.3	.6	.4	.6	.3
Salts and peppers	1.2	.5	.9	.4	.4	.1
Cookie jars with covers	1.0	1.6	.3	.7	.3	.4
All other tableware	2.9	2.7	2.9	2.5	2.5	3.2
Total dinnerware and short-line tableware	97.0	96.0	97.5	97.2	95.4	97.1
Kitchenware	3.0	4.0	2.5	2.8	4.6	2.9
Cereal sets	.4	.4	.1	.1	.3	.1
Bowls	1.1	1.5	1.5	1.3	2.7	1.4
Ice-box and range sets	.5	.5	.2	.2	.1	.1
Other kitchenware	1.0	1.6	.7	1.2	1.5	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

[1] Less than 1/10 of 1 percent.

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TABLE 49.—*Household table and kitchen articles, decorated or colored: Imports from Japan, showing separately the earthenware and china articles combined in table 16*

	Earthenware, decorated or colored						China, decorated or colored					
	1933, first half	1933, second half	1934, first half	1933, first half	1933, second half	1934, first half	1933, first half	1933, second half	1934, first half	1933, first half	1933, second half	1934, first half
	Dozen pieces	*Dozen pieces*	*Dozen pieces*	*Value*	*Value*	*Value*	*Dozen pieces*	*Dozen pieces*	*Dozen pieces*	*Value*	*Value*	*Value*
Tableware and kitchenware (total)	816,105	1,210,998	1,164,136	$199,508	$419,781	$410,137	1,657,489	2,339,505	1,519,189	$446,935	$768,957	$836,451
1. Dinner sets (total)	3,893	4,755	26,912	1,655	3,890	9,042	282,270	357,091	436,409	192,792	341,120	477,894
Not over 31 pieces												
32 pieces	648		3,349	169		1,170	28,952	15,525	31,154	7,319	4,901	9,100
33 to 52 pieces	3,245	2,489	22,282	1,486	2,280	7,439	3,296	4,956	2,698	2,424	5,358	3,243
53 to 56 pieces			1,281			433	15,098	18,463	11,207	10,419	15,624	9,803
57 to 62 pieces		2,266			1,610		4,024	4,391	3,828	3,877	4,795	5,496
63 to 66 pieces							13,073	13,310	18,634	10,173	13,753	20,819
67 to 92 pieces							1,156	1,736	3,941	950	1,813	5,704
93 to 96 pieces							171,378	211,208	255,141	122,236	203,143	285,316
97 pieces or more							45,293	87,502	109,806	35,394	91,733	138,413
2. Other tableware (total)	481,259	878,459	898,045	125,636	317,436	313,906	1,326,370	1,924,998	1,013,200	236,370	406,237	333,959
Cups and saucers, not parts of sets (total)	58,472	188,250	135,568	7,440	29,845	23,979	879,238	1,239,972	506,137	104,540	189,608	108,420
Cups and saucers	56,340	186,796	132,028	7,193	29,583	23,200	870,082	1,217,658	500,982	103,225	185,724	107,120
Cups only	2,132	1,454	2,370	247	262	575	8,800	22,052	4,988	1,227	3,793	1,207
Saucers only			1,170			204	356	262	167	88	91	93
Plates	11,611	23,241	65,002	2,322	9,808	26,716	42,906	47,861	60,255	25,751	35,580	47,914
Tea, coffee, and other sets	18,444	77,712	77,955	4,888	28,287	31,104	212,756	386,347	286,382	38,409	86,981	83,088
Other articles	392,732	589,256	619,520	110,986	249,496	232,107	191,470	250,818	160,516	67,670	94,068	94,537
3. Kitchenware	330,953	327,784	239,179	72,217	98,455	87,189	48,849	57,416	69,490	17,773	21,600	24,598

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TABLE 50.—*Landed costs of decorated household tableware imported from Japan: Detail of costs of identical articles shown in table 18*

Item no.	Item	Unit of quantity	1933 (January–June)				1933 (July–December)				1934 (January–June)				1934 (July–December)			
			Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer
	DECORATED CHINA																	
1	Cups and saucers (short-line)	Doz. prs.	$0.189	$0.116	$0.333	$0.638	$0.255	$0.125	$0.379	$0.759	$0.301	$0.130	$0.410	$0.841	$0.318	$0.131	$0.422	$0.871
2	do	Doz. prs.	.171	.108	.319	.598	.252	.118	.377	.747	.301	.124	.410	.835	.318	.125	.422	.865
3	do	Doz. prs.	.177	.141	.324	.642	.252	.152	.377	.781	.331	.161	.431	.923	.337	.161	.436	.934
4	do	Doz. prs.	.187	.113	.331	.631	.268	.122	.387	.777	.301	.130	.410	.841	.318	.131	.422	.871
5	do	Doz. prs.	.248	.119	.373	.740	.343	.129	.440	.912	.392	.134	.475	1.001	.392	.135	.475	1.002
6	do	Doz. prs.	.158	.113	.311	.582	.203	.119	.342	.664	.301	.130	.410	.841	.318	.131	.422	.871
7	do	Doz. prs.	.537	.100	.576	1.213	.708	.104	.696	1.508	.771	.104	.739	1.614	.780	.104	.746	1.630
8	do	Doz. prs.	.352	.101	.446	.899	.461	.104	.523	1.088	.500	.104	.550	1.154	.504	.104	.553	1.161
9	do	Doz. prs.	.484	.100	.539	1.123	.641	.104	.648	1.393	.698	.105	.689	1.492	.709	.104	.697	1.510
10	do	Doz. prs.	.352	.101	.446	.899	.461	.104	.523	1.088	.500	.104	.550	1.154	.504	.104	.553	1.161
11	do	Doz. prs.	.113	.101	.279	.493	.166	.107	.316	.589	.301	.118	.410	.829	.318	.119	.422	.859
12	do	Doz. prs.	.189	.135	.333	.657	.244	.142	.371	.757	.331	.148	.431	.910	.338	.148	.436	.922
13	do	Doz. prs.	.129	.078	.291	.498	.182	.085	.328	.595	.195	.087	.337	.619	.191	.086	.333	.610
14	Plates (short-line)	Doz.	.252	.182	.277	.711	.355	.195	.348	.898	.444	.204	.411	1.059	.460	.205	.422	1.087
15	Dinner sets, 32-piece	Sets	3.404	.291	2.649	6.344	4.827	.299	3.646	8.772	5.446	.302	4.079	9.827	5.584	.301	4.176	10.061
16	do	Sets	1.925	.291	1.614	3.830	2.620	.299	2.101	5.020	2.958	.302	2.338	5.598	3.037	.301	2.393	5.731
17	do	Sets	2.334	.291	1.900	4.525	3.307	.299	2.582	6.188	3.720	.302	2.871	6.893	3.807	.301	2.932	7.040
18	do	Sets	1.492	.291	1.311	3.094	2.034	.299	1.691	4.024	2.304	.302	1.880	4.486	2.371	.301	1.927	4.599
19	Dinner sets, 53-piece	Sets	6.016	.527	4.653	11.196	8.529	.543	6.412	15.484	9.618	.548	7.174	17.340	9.861	.546	7.345	17.752
20	do	Sets	2.612	.511	2.270	5.393	3.554	.527	2.929	7.010	4.050	.532	3.259	7.841	4.140	.530	3.340	8.010
21	do	Sets	4.066	.511	3.288	7.865	5.763	.526	4.476	10.765	6.488	.532	4.984	12.004	6.641	.530	5.090	12.261
22	do	Sets	3.382	.511	2.809	6.702	4.600	.526	3.662	8.788	5.196	.532	4.079	9.807	5.335	.530	4.176	10.041
23	Dinner sets, 93-piece	Sets	6.027	1.140	4.994	12.161	9.516	1.191	7.436	18.143	10.548	1.214	8.159	19.921				
24	do	Sets	5.086	1.141	4.335	10.562	7.952	1.191	6.342	15.485	8.809	1.214	6.912	16.965				
25	do	Sets	7.933	1.141	6.328	15.402	12.530	1.191	9.546	23.267	13.864	1.214	10.480	25.558				
26	Dinner sets, 94-piece	Sets	3.563	1.139	3.277	7.979	6.310	1.190	5.200	12.700	7.536	1.213	6.059	14.808				
27	do	Sets	4.885	1.139	4.203	10.227	7.718	1.190	6.186	15.094	9.490	1.213	7.426	18.129				
28	do	Sets	5.657	1.139	4.744	11.540	8.625	1.190	6.821	16.636	10.091	1.213	7.846	19.150				
29	do	Sets	6.046	1.139	5.015	12.200	9.256	1.190	7.263	17.709	10.586	1.213	8.194	19.993				
30	do	Sets	6.245	1.139	5.155	12.539	9.496	1.190	7.431	18.117	11.082	1.213	8.541	20.836				
31	do	Sets	6.520	1.139	5.347	13.006	9.913	1.190	7.722	18.825	11.569	1.213	8.882	21.664				
32	do	Sets	6.839	1.139	5.570	13.548	10.437	1.190	8.110	19.767	12.362	1.213	9.437	23.012				
33	do	Sets	7.301	1.139	5.894	14.334	11.680	1.190	8.959	21.829	14.736	1.213	11.099	27.048				
	DECORATED EARTHENWARE																	
49	Cups and saucers	Doz. prs.	.199	.126	.300	.625	.267	.134	.334	.735	.300	.142	.350	.792	.318	.143	.359	.820

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TABLE 51.—*Landed costs of decorated household tableware imported from Japan: Detail of costs of identical articles shown in table 18a*

Item no	Item	Unit of quantity	1933 (January-June)				1933 (July-December)				1934 (January-June)				1934 (July-December)			
			Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer
	DECORATED CHINA																	
34	Tea sets, 23-piece	Set	$0.264	$0.224	$0.377	$0.865	$0.349	$0.235	$0.436	$1.020	$0.387	$0.240	$0.463	$1.090	$0.388	$0.240	$0.463	$1.091
35	do	Set	.211	.211	.399	.761	.314	.226	.412	.952	.353	.231	.439	1.023	.376	.233	.455	1.064
36	do	Set	.264	.231	.376	.871	.308	.240	.408	.956	.406	.253	.475	1.134	.397	.251	.469	1.117
37	do	Set	.132	.150	.285	.567	.182	.159	.319	.660	.222	.163	.348	.733	.207	.168	.381	.819
38	do	Set	.340	.220	.430	.990	.435	.233	.496	1.164	.466	.238	.517	1.221	.480	.237	.528	1.245
39	do	Set	2.272	.242	1.782	4.296	3.152	.249	2.398	5.799	3.481	.251	2.628	6.360	3.411	.250	2.579	6.240
40	do	Set	.913	.242	.831	1.986	1.261	.249	1.074	2.584	1.390	.251	1.165	2.806	1.367	.250	1.149	2.766
41	Tea sets, 29-piece	Set	.706	.277	.736	1.719	.972	.284	.922	2.178	1.070	.287	.991	2.348	1.097	.286	1.009	2.392
42	Teapots, 3-cup	Doz	.261	.312	.383	.956	.365	.326	.456	1.147	.454	.336	.517	1.307	.546	.345	.582	1.473
43	Teapots, 5-cup	Doz	.482	.559	.538	1.579	.655	.585	.659	1.899	.726	.593	.708	2.027	.754	.592	.728	2.074
44	do	Doz	.515	.574	.560	1.649	.743	.609	.720	2.072	.832	.621	.782	2.235	.881	.625	.816	2.322
45	Sugars and creamers	Doz. prs	.448	.403	.614	1.465	.625	.425	.737	1.787	.721	.436	.805	1.962	.791	.443	.854	2.088
46	Salad bowls	Doz	.286	.267	.300	.853	.372	.279	.360	1.011	.442	.287	.410	1.139	.523	.294	.466	1.283
47	Bonbon dishes	Doz	.193	.142	.235	.570	.250	.148	.275	.673	.278	.152	.295	.725	.283	.153	.298	.734
48	Cookie jars	Doz	1.884	.678	1.519	4.081	2.693	.770	2.085	5.548	3.006	.804	2.304	6.114	3.171	.820	2.419	6.410
	DECORATED EARTHENWARE																	
50	Teapots, 3-cup	Doz	.231	.256	.315	.802	.317	.268	.358	.943	.351	.272	.376	.999	.352	.272	.376	1.000
51	Teapots, 5-cup	Doz	.567	.694	.483	1.744	.782	.723	.591	2.096	.878	.732	.639	2.249	.857	.729	.679	2.215
52	Sugars and creamers	Doz. prs	.373	.343	.487	1.203	.530	.362	.565	1.457	.619	.372	.610	1.601	.628	.373	.614	1.615
53	Cookie jars	Doz	.521	.549	.461	1.531	.709	.572	.554	1.835	.817	.581	.608	2.006	.799	.578	.599	1.976
54	Salad bowls	Doz	.406	.337	.303	1.046	.547	.355	.374	1.276	.601	.361	.401	1.363	.602	.361	.401	1.364
55	Cake plates and servers	Doz	.853	.642	.627	2.122	1.090	.677	.745	2.512	1.335	.702	.868	2.905	1.337	.701	.869	2.907
56	Waffle sets, 5-piece	Doz. sets	1.291	1.115	1.146	3.552	1.709	1.170	1.354	4.233	1.947	1.198	1.474	4.619	2.041	1.206	1.520	4.767

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TABLE 52.—*Decorated earthenware household tableware: Details of average landed costs to importer for imports from Japan of all articles of specified class, shown in table 19*

Item no.	Item	Unit of quantity	1933 (January–June)				1933 (July–December)				1934 (January–June)			
			Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer
	SHORT-LINE TABLEWARE													
1	Cups and saucers	Doz. prs.	$0.257	$0.120	$0.329	$0.706	$0.327	$0.129	$0.366	$0.822	$0.553	$0.145	$0.477	$1.175
2	do	Doz. prs.	.158	.113	.279	.550	.293	.126	.347	.766	.308	.127	.354	.789
3	do	Doz. prs.	.227	.118	.314	.659	.242	.122	.321	.685	.361	.131	.381	.873
4	do	Doz. prs.	.172	.114	.286	.572	.287	.126	.344	.757	.302	.127	.351	.780
5	do	Doz. prs.	.258	.120	.329	.707	.430	.136	.415	.981				
6	do	Doz. prs.	.266	.121	.333	.720	.325	.128	.363	.816				
7	do	Doz. prs.	.223	.118	.312	.653	.281	.125	.341	.747	.317	.128	.359	.804
8	do	Doz. prs.	.281	.122	.341	.744	.405	.134	.403	.942	.416	.135	.408	.959
	Weighted average (items 1 to 8)					.691				.815				.857
9	Plates	Doz.					.334	.199	.267	.800	.335	.200	.268	.803
10	do	Doz.	.232	.186	.216	.634	.647	.223	.424	1.294	.899	.242	.550	1.691
11	do	Doz.	.208	.185	.204	.597	.366	.201	.283	.850	.352	.201	.276	.829
12	do	Doz.	.288	.191	.244	.723	.504	.212	.352	1.068				
13	do	Doz.	.211	.185	.206	.602	.529	.214	.364	1.107				
14	do	Doz.	.473	.204	.336	1.013	.581	.218	.390	1.189	.442	.208	.321	.971
	Weighted average (items 9 to 14)					.610				.937				.922
	OTHER TABLEWARE													
15	Teapots	Doz.	.847	.683	.624	2.154	.872	.703	.636	2.211	.951	.714	.676	2.341
16	do	Doz.	.701	.672	.550	1.923	.528	.678	.464	1.670	.754	.700	.577	2.031
17	do	Doz.	.986	.693	.693	2.372	.913	.706	.656	2.275	.618	.689	.509	1.816
18	do	Doz.	.193	.633	.296	1.122	.350	.664	.375	1.389	.964	.715	.682	2.361
19	do	Doz.	.673	.669	.536	1.878	1.221	.730	.810	2.761	1.016	.719	.708	2.443
20	do	Doz.	.691	.671	.546	1.908	.729	.693	.564	1.986	1.556	.760	.978	3.294
21	do	Doz.	.573	.662	.486	1.721	.752	.694	.576	2.022	.788	.702	.594	2.084
22	do	Doz.	1.096	.701	.748	2.545	1.440	.746	.920	3.106	1.392	.747	.896	3.035
	Weighted average (items 15 to 22)					1.645				2.057				2.285

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TABLE 52.—*Decorated earthenware household tableware: Details of average landed costs to importer for imports from Japan of all articles of specified class, shown in table 19*—Continued

Item no.	Item	Unit of quantity	1933 (January-June)				1933 (July-December)				1934 (January-June)			
			Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer
	SHORT-LINE TABLEWARE—continued													
23	Sugars and creamers	Doz. prs.					1.178	.486	.889	2.553	.983	.474	.792	2.249
24	do	Doz. prs.	.345	.412	.472	1.229	.499	.435	.550	1.484	.417	.431	.508	1.356
25	do	Doz. prs.	1.278	.482	.939	2.699					.903	.468	.752	2.123
26	do	Doz. prs.	.487	.422	.544	1.453	.708	.451	.654	1.813	.731	.455	.666	1.852
27	do	Doz. prs.	.619	.432	.610	1.661	.808	.465	.749	2.112	1.572	.518	1.086	3.176
28	do	Doz. prs.	.667	.436	.634	1.737	.763	.455	.682	1.900	.666	.450	.633	1.749
	Weighted average (items 23 to 28)					1.575				1.883				1.838
29	Cookie jars	Doz.	1.164	.595	.782	2.541	1.564	.641	.982	3.187	1.923	.672	1.162	3.757
30	do	Doz.					1.534	.639	.967	3.140	.831	.590	.616	2.037
31	do	Doz.	.566	.550	.483	1.599	.701	.577	.550	1.828	1.041	.606	.720	2.367
32	do	Doz.	1.041	.586	.720	2.347	1.272	.619	.836	2.727	1.119	.612	.760	2.491
33	do	Doz.	.507	.546	.454	1.507	.620	.570	.510	1.700	1.223	.620	.812	2.655
34	do	Doz.	1.606	.628	1.003	3.237	1.065	.671	1.182	3.818	2.318	.702	1.359	4.379
35	do	Doz.	1.043	.586	.722	2.351	1.486	.635	.943	3.604	1.223	.620	.812	2.655
36	do	Doz.	.872	.573	.636	2.081	1.130	.609	.765	2.504				
37	do	Doz.	.587	.552	.494	1.633	.762	.581	.581	1.924				
	Weighted average (items 29 to 37)					1.969				2.351				3.250
38	Mugs	Doz.	.299	.131	.250	.680	.376	.141	.288	.805	.814	.174	.507	1.495
39	do	Doz.	.210	.125	.205	.540	.314	.137	.257	.708				
40	do	Doz.	.210	.125	.205	.540	.239	.131	.220	.590	.197	.128	.198	.523
41	do	Doz.	.135	.119	.167	.421	.232	.130	.216	.578	.272	.133	.236	.641
42	do	Doz.	.334	.134	.267	.735	.574	.156	.387	1.117	.507	.151	.354	1.012
43	do	Doz.	.121	.118	.160	.399	.207	.129	.204	.540				
44	do	Doz.	.150	.120	.175	.445	.257	.132	.228	.617	.287	.135	.244	.666
45	do	Doz.					.527	.153	.364	1.044	.577	.156	.388	1.121
	Weighted average (items 38 to 45)					.507				.658				.776
46	Tea sets, 23-piece	Sets.	.494	.249	.439	1.182	.731	.274	.557	1.562	.841	.283	.612	1.736
47	do	Sets.					.641	.267	.512	1.420	.635	.268	.509	1.412
48	do	Sets.	.537	.252	.460	1.249	.855	.283	.619	1.757				
49	do	Sets.	.346	.238	.365	.949	.550	.260	.467	1.277	.608	.266	.496	1.370
	Weighted average (items 46 to 49)					1.111				1.492				1.488

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TABLE 53.—*Decorated china household tableware: Detail of average landed costs to importers for imports from Japan of all articles of specified class, shown in table 19*

Item no.	Item	Unit of quantity	1933 (January–June)				1933 (July–December)				1934 (January–June)			
			Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer
	SHORT-LINE TABLEWARE													
1	Cups and saucers	Dozen pairs	$0.260	$0.117	$0.382	$0.759	$0.352	$0.126	$0.446	$0.924	$0.498	$0.128	$0.549	$1.175
2	do	do	.590	.145	.613	1.348	.639	.152	.647	1.438	.649	.153	.654	1.456
3	do	do	.180	.115	.326	.621	.312	.127	.418	.857	.312	.127	.418	.857
4	do	do	.251	.120	.376	.747	.361	.131	.453	.945	.479	.140	.535	1.154
5	do	do	.197	.116	.338	.651	.219	.120	.353	.692	.559	.146	.591	1.296
6	do	do	.198	.116	.339	.653	.255	.123	.378	.756	.302	.127	.411	.840
7	do	do	.166	.113	.316	.595	.213	.120	.349	.682				
8	do	do	.207	.117	.345	.669	.266	.124	.386	.776	.340	.130	.438	.908
9	do	do	.180	.115	.326	.621	.214	.120	.350	.684	.284	.125	.399	.808
10	do	do	.212	.117	.348	.677	.271	.124	.390	.785	.340	.130	.438	.908
11	do	do	.303	.124	.412	.839	.432	.136	.502	1.070				
12	do	do	.216	.117	.351	.684	.341	.130	.439	.910				
	Weighted average (items 1 to 12)					.704				.837				1.052
13	Plates	Dozen	.665	.219	.566	1.450	.584	.218	.509	1.311	.855	.239	.698	1.792
14	do	do	.262	.189	.283	.734	.384	.203	.369	.956	.433	.207	.403	1.043
15	do	do	.243	.187	.270	.700	.358	.201	.351	.910	.319	.199	.323	.841
16	do	do	.273	.189	.291	.753	.400	.204	.380	.984	.422	.207	.395	1.024
17	do	do	.178	.182	.225	.585	.260	.194	.282	.736	.414	.206	.390	1.010
18	do	do	.255	.188	.278	.721	.418	.205	.393	1.016	.475	.211	.432	1.118
	Weighted average (items 13 to 18)					.978				1.164				1.271
	Dinner sets:													
19	32-piece	Set	2.360	.292	1.919	4.571	3.061	.301	2.410	5.772	2.789	.303	2.219	5.311
20	do	do	1.047	.292	1.000	2.339	1.553	.301	1.354	3.208	3.014	.303	2.377	5.694
	Weighted average (items 19 to 20)					2.570				3.840				5.403
21	54 piece	Set	3.426	.528	2.848	6.802	4.394	.545	3.526	8.465	4.599	.548	3.669	8.816
22	do	do	3.322	.528	2.775	6.625	3.821	.545	3.125	7.491	5.353	.548	4.197	10.098
	Weighted average (items 21 to 22)					6.640				7.582				9.804

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TABLE 53.—*Decorated china household tableware: Detail of average landed costs to importers for imports from Japan of all articles of specified class, shown in table 19*—Continued

Item no.	Item	Unit of quantity	1933 (January-June)				1933 (July-December)				1934 (January-June)			
			Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer	Value at plant, packed	Charges to New York City	Computed duty	Total cost to importer
	SHORT-LINE TABLEWARE—continued													
23	66-piece	Set	4.207	.732	3.558	8.587	5.638	.755	4.497	10.890	5.684	.760	4.529	10.973
24	----do	----do	5.191	.732	4.184	10.107	6.847	.755	5.343	12.945	7.405	.760	5.734	13.899
	Weighted average (items 23 to 24)					9.291				12.036				11.592
25	94-piece	Set	5.358	1.143	4.534	11.035	7.116	1.194	5.764	14.074	8.133	1.206	6.476	15.815
26	----do	----do	6.258	1.143	5.164	12.565	7.244	1.194	5.854	14.292	8.828	1.206	6.963	16.997
	Weighted average (items 25 to 26)					11.080				14.094				16.515
27	105-piece	Set	6.904	1.257	5.375	13.036	8.865	1.315	7.098	17.278	10.295	1.328	8.098	19.721
28	----do	----do	7.403	1.257	6.074	14.734	9.891	1.315	7.816	19.022	11.571	1.328	8.992	21.891
	Weighted average (items 27 to 28)					13.426				17.720				20.208
	OTHER TABLEWARE													
29	Teapots	Dozen	.499	.580	.549	1.628	.728	.615	.710	2.053	.774	.622	.742	2.138
30	----do	----do	3.097	.775	2.368	6.240	3.025	.787	2.318	6.130	3.809	.850	2.866	7.525
31	----do	----do	.624	.590	.637	1.851	.637	.608	.646	1.891	.780	.622	.746	2.148
32	----do	----do	.720	.597	.704	2.021	1.028	.637	.920	2.585	2.650	.763	2.055	5.468
33	----do	----do	.618	.589	.633	1.840	.494	.597	.546	1.637	.918	.633	.843	2.394
34	----do	----do	.475	.579	.532	1.586	.575	.603	.602	1.780	.342	.590	.439	1.371
35	----do	----do	.479	.579	.535	1.593	.580	.604	.606	1.790				
36	----do	----do	.433	.575	.503	1.511	.524	.599	.567	1.690	.528	.604	.570	1.702
37	----do	----do	.417	.574	.492	1.483	.439	.593	.507	1.539	.529	.604	.570	1.703
38	----do	----do	.607	.589	.625	1.821	.650	.609	.655	1.914	.645	.612	.652	1.909
39	----do	----do	.430	.575	.501	1.506	.461	.595	.523	1.579				
	Weighted average (items 29 to 39)					1.702				1.853				1.931
40	Tea sets, 23-piece	Set	.316	.235	.413	.964	.425	.248	.489	1.162	.738	.262	.708	1.708
41	----do	----do	.317	.236	.414	.967	.390	.248	.465	1.103	2.164	.382	1.706	4.252
42	----do	----do	.360	.239	.444	1.043	.425	.251	.489	1.165	.396	.250	.469	1.115
43	----do	----do	.382	.241	.459	1.082	.439	.252	.499	1.190	.522	.259	.557	1.338
44	----do	----do	.347	.238	.435	1.020	.662	.269	.655	1.586	.524	.259	.558	1.341
45	----do	----do	.329	.237	.422	.988	.360	.246	.444	1.050	.721	.274	.696	1.691
46	----do	----do	.293	.234	.397	.924	.320	.236	.416	.972	.342	.246	.431	1.019
47	----do	----do	.255	.231	.370	.856	.329	.244	.422	.995				
	Weighted average (items 40 to 47)					.981				1.326				1.387

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UNITED STATES TARIFF COMMISSION

SUN GLASSES OR SUN GOGGLES

REPORT No. 103
SECOND SERIES

UNITED STATES
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SUN GLASSES OR SUN GOGGLES

INTRODUCTION

In response to a request from the President under date of June 27, 1934, the Commission made an investigation and held a hearing with respect to sun goggles or sun glasses and frames therefor (hereinafter for convenience called sun glasses) under the provisions of the National Recovery Act. The Commission instituted this investigation under section 3 (e) of the National Industrial Recovery Act of June 29, 1934, and on the same day it gave notice that a public hearing would be held on July 18, 1934. At this hearing, held in Washington, D. C., parties interested were given opportunity to be present, to produce evidence, and to be heard. On December 4, 1934, the Commission made its report to the President under section 3 (e).

A summary of the information obtained in this investigation follows.

SUMMARY

1. The manufacturing establishments producing sun glasses in the United States were all operating under the code of fair competition of the optical goods industry. The sun-glass business, however, is a distinct branch, most of the producers substantially confining their output to sun glasses.

2. The duties on sun glasses, being the same as on other eyeglasses, in both the acts of 1922 and 1930, have been as follows:

Valued at not more than 65 cents per dozen, 20 cents per dozen and 15 percent ad valorem, the compound rate being equivalent to about 70 percent ad valorem, on the basis of the actual unit values of imports in 1933 and 1934.

Valued at more than 65 cents but not more than $2.50 per dozen, 60 cents per dozen and 20 percent ad valorem, representing a range in ad valorem equivalent from 112 percent to 44 percent.

Valued at more than $2.50 per dozen, 40 percent ad valorem.

3. Import statistics do not distinguish between sun glasses and other eyeglasses (spectacles) and goggles. Practically all imports valued at not over 65 cents per dozen are sun glasses. Most of those in the two higher value brackets are eyeglasses, with a few goggles for industrial use and a very few high-priced sun glasses.

4. Prior to 1933 the imports under this tariff provision consisted chiefly of eyeglasses with a very limited number of industrial goggles and sun glasses. There is consequently no significance for the purpose of the present investigation in comparison between the imports during those years and the imports of 1933 and 1934, which have consisted chiefly of sun glasses. Moreover, during years preceding 1933 most of the imports were in the higher value brackets

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whereas in 1933 and 1934 they were mostly in the bracket valued at less than 65 cents per dozen.

5. In 1932 the imports (for consumption) under paragraph 225 of the tariff act, "spectacles, eye glasses, and goggles, and frames for the same", amounted to 456 gross, valued at $8,200 (average value about $1.50 per dozen); very few sun glasses were apparently included in these figures. In 1933 they amounted to 3,146 gross, valued at $16,800, the increase being chiefly in imports of sun glasses from Japan. During the first half of 1934 they amounted to 7,716 gross, valued at $36,800. The average unit value of the imports during 1933 and the first half of 1934 was a little over 40 cents per dozen. More than 95 percent in number and about 65 percent in value of the total imports during these periods fell under the lowest value bracket (glasses valued not over 65 cents per dozen) and the imports under this bracket consisted almost exclusively of sun glasses coming from Japan. Imports for consumption were approximately 4,200 gross in July 1934, 900 gross in August, 300 gross in September, and 6,500 gross in October. Imports in July and October, which considerably exceeded those in any month preceding July, were perhaps in large part due to anticipation of possible action by the Government as a result of the complaint under section 3 (e).

6. The sale of sun glasses is highly seasonal, being naturally greatest in the summer months. Both domestic production and imports are consequently highly variable during different seasons of the year. Moreover, by reason of the seasonal demand, the monthly movement of "general" imports (quantity entering the country) is not parallel with that of imports for consumption and there are consequently marked variations in the stocks of imported sun glasses held in bonded warehouses. During the last half of 1933 general imports exceeded imports for consumption so that about 5,000 gross had been accumulated in bonded warehouse by the end of the year. Notwithstanding the large entries for consumption during the first half of 1934 (representing entries from abroad for direct consumption plus withdrawals from warehouse), the quantity in warehouse still exceeded 5,000 gross at the end of June 1934. General imports and imports for consumption during July were approximately equal but general imports of sun glasses with celluloid frames amounted to 2,860 gross in August 1934 and to 1,150 gross in September, against imports for consumption of 800 and 22 gross respectively. The accumulation in bonded warehouses rose to over 8,000 gross at the end of September. During October imports for consumption exceeded general imports by more than 5,000 gross and warehouse stocks were reduced to approximately 3,000 gross.

7. During 1933 the total imports (for consumption) from Japan of sun glasses, spectacles, eyeglasses, and goggles, including frames, valued at not over 65 cents per dozen, consisting almost exclusively of sun glasses, amounted to 2,938 gross. Sales of domestic sun glasses of all classes during that year amounted to 90,712 gross; the ratio of imports to domestic sales being thus 3.2 percent. The imports during the first half of 1934 were 7,550 gross and the domestic sales 76,057 gross, imports thus being equal to nearly 10 percent of domestic sales. On the basis of value the ratio is different. If to the foreign value of the imports there be added the duty and import expenses, roughly doubling the amount, the value in the United

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States of the total imports of sun glasses valued not over 65 cents per dozen in 1933 was in the neighborhood of $25,000, whereas the value of the domestic output of sun glasses was about $1,700,000, imports being equal thus to less than 2 percent of the domestic output. Similarly computed, the value of imports in the first half of 1934 was about $65,000, equal to less than 5 percent of the value of the domestic output, which was approximately $1,500,000.

8. The domestic industry manufactures sun glasses of widely different prices. Roughly classified according to wholesale values, corresponding approximately to prevailing retail price groups, the output during the period January–June 1934 fell, as regards number of units, into groups as follows: For sale at 10 cents retail, 18½ percent; at 20 cents retail, 22 percent; at 25 cents retail, 21 percent; and at over 25 cents retail, 38½ percent. In terms of value, sun glasses intended to sell at 10 cents retail represented considerably less than 10 percent of the total, and those intended to sell at 20 cents retail represented approximately 20 percent of the total.

9. The direct competition of imports is chiefly with domestic sun glasses intended to sell at not more than 20 cents retail. Imports having a foreign unit value not over 65 cents per dozen are capable of being sold at not more than 20 cents per pair retail. The imports for consumption during the first half of 1934 were equal to about 24 percent of the domestic production of corresponding retail price.

10. The demand for sun glasses has been steadily increasing in recent years. It was greater in 1934 than in 1933. Under this favorable market situation, both domestic producers and importers have been able to sell increased quantities and, in general, to advance prices. Most of the increase in sales of the lower-priced glasses has been of the imported article, whereas all of the increase in the highest retail price group has been in the domestic product.

11. The improved situation of the domestic producers during the first half of 1934 as against the first half of 1933 is shown by the statistics of total sales and of sales by price groups. Sales of all classes of sun glasses by domestic producers amounted to 48,280 gross during the first half of 1933 and to 76,057 gross during the first half of 1934, an increase of nearly 60 percent, apparently due in part to the fact that the active season of 1934 was earlier than that of 1933. The output of glasses intended to sell at 10 cents retail increased 22 percent; those intended to sell at 20 cents, 13½ percent; those intended to sell at 25 cents, 96½ percent; and of glasses of higher-priced groups (over 25 cents), 112 percent. The increase in sales in the higher-priced groups was partly due to the advance in the prices, resulting in the shift in glasses of a given grade, from one price group to that next higher.

12. Regarding costs of production of domestic sun glasses and the prices of imported Japanese glasses, the investigation disclosed the following facts:

(*a*) Costs of production of the cheaper types of sun glasses in the United States have increased approximately $2 per gross since the N. R. A. code was adopted. Only about 60 cents of the $2 represents increase in labor costs, which may be directly attributed to the code applying to the optical goods industry. The remaining increase, amounting to $1.40 per gross, was due entirely to advance in material costs, principally of celluloid. Black celluloid, the chief

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material for low-grade goggles, rose 46 percent in price. The extent to which this increase was due to the application of code provisions in the celluloid industry, which is composed of relatively few concerns, has not been determined.

(*b*) As indicated by data obtained from four leading concerns, the domestic sun goggle industry operated successfully in 1933, having shown a net profit for the year in addition to liberal salaries paid to proprietary officers. For these 4 firms executive salaries paid to 10 officers equaled 40 percent of labor costs and combined with net profits amounted to approximately 12 percent of total net sales.

(*c*) Prices of domestic sun glasses were very generally increased after the adoption of the N. R. A. code.

(*d*) The prices at which Japanese sun glasses have been coming into the United States, duty paid, are decidedly lower than the costs of production of corresponding glasses in this country. In addition to any advantage in manufacturing labor costs which the Japanese producers may possess, they also have cheaper materials, as indicated by prices of lenses and of celluloid manufactured in Japan. The lower prices for celluloid may be partly due to Japan's control of the production of natural camphor.

(*e*) From early 1933 to the summer of 1934 the dollar cost to importers of sun glasses purchased in Japan increased on the average about $1 per gross, or between 25 and 30 percent. This increase was not so great as the advance in yen exchange (i. e., in the dollar value of the yen), the prices of sun glasses in yen having declined. It should be noted, however, that the appreciation of the yen in terms of dollars during this period was from an abnormally low point and went no further than to offset the marked decline in yen exchange which occurred during the last 6 months of 1932.

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GENERAL INFORMATION OBTAINED IN THE INVESTIGATION

The articles included within the scope of this investigation are used solely to protect the eyes from excessive light by means of colored lenses. There are several distinct types; these are listed below in the order of their approximate importance in consumption at the present time.

1. Glasses with frames of cellulose compounds (celluloid) similar to frames of ordinary spectacles.
2. Sport glasses or sport goggles having cellulose or metal frames, and large oval or irregularly shaped lenses, and hinged centers.
3. Sun glasses with rigid metal frames similar to frames of ordinary spectacles.
4. Slip-over glasses having either metal or cellulose frames designed to hook over the lenses of ordinary spectacles.

A small proportion of the first class is made with celluloid lenses and a small proportion of each class has ground and polished glass lenses, but those equipped with blown glass lenses constitute the bulk of consumption.

Sun glasses with celluloid frames still predominate, but there is a marked trend toward the production of those with metal frames.

Although sun glasses have been the product of a distinct industry in the United States for at least 20 years, only since 1925 have they become sufficiently popular to warrant volume production and permit their sale at prices within the reach of the general population.

There are 21 producers in the United States, mostly near the Atlantic seaboard, of which all but 4 or 5 manufacture the entire article except the lenses.

The industry is highy seasonal, as sun glasses are sold mostly for vacation use, with the result that about 53 percent of all sales from the factories are made from May to August. About 28 percent of sales occur during the first 4 months of the year and only 19 percent during the last 4 months. As orders are usually made up when received, to avoid the risk of carrying stock which may become out of fashion, employment and production are at a minimum during the fall and winter months. Some producers make articles other than sun glasses and have a more uniform scale of operations, but these produce only a relatively small proportion of the total output.

The sun-glass industry has had its most rapid expansion during the last 3 or 4 years, and is one of the comparatively few industries that has increased production during the period of depression. In 1933 all of the companies whose records were examined earned profits. The recent shift in consumption from sun glasses with celluloid frames toward those with metal frames has encouraged the installation of additional manufacturing facilities, so that there is danger that the industry may develop excessive capacity unless the demand continues to increase rapidly.

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Imported sun glasses supplied no appreciable part of consumption in the United States until the second quarter of 1933, when substantial quantities were entered from Japan and distributed mainly through the chain stores to be retailed in the 10-, 15-, 20-, and 25-cent price ranges.

Beginning with January 1934 imports for consumption (including withdrawals of merchandise previously placed in bonded warehouses) increased rapidly and soon came to supply a substantial proportion of the United States market notwithstanding an increase of about 40 percent in the value of the yen in 1934 as compared with 1933. Practically all the imports of sun glasses with celluloid frames are from Japan and have a foreign value of not more than 65 cents per dozen. There were also small imports from Japan of sun glasses with metal frames, valued at not more than 65 cents per dozen.

Status of the Industry Under the National Industrial Recovery Act

The domestic sun-glass industry operated under the code of fair competition of the optical manufacturing industry, which became effective on October 16, 1933. This code covered the entire field of manufacture of optical goods, of which the sun-glass industry is a small part. The code contained maximum hour and minimum wage provisions but no fair trade practice or price regulations.

The industries producing the raw materials used by manufacturers of sun glasses also operated under codes of fair competition.

Rates of Duty

Sun glasses are not mentioned separately in the Tariff Act of 1930 but are dutiable under paragraph 225, which covers "spectacles, eyeglasses, and goggles, and frames for the same." The rates under the last three tariff acts have been as follows:

Tariff Act of—	Paragraph	Valued at not over 65 cents per dozen	Valued at over 65 cents but not over $2.50 per dozen	Valued over $2.50 per dozen
1930	225	20 cents per dozen and 15 percent.	60 cents per dozen and 20 percent.	40 percent.
1922	225	do	do	Do.
1913	91	35 percent	35 percent	35 percent.

IMPORTS

Imports of spectacles, eyeglasses, goggles, and of frames therefor are shown in table 1 for the period January 1, 1926, to October 31, 1934. Total figures are given, as well as a segregation to the three different value brackets.

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TABLE 1.—*Spectacles, eyeglasses, and goggles, and frames and parts thereof: Imports for consumption, by value groups*

Year	Total imports all brackets		Valued at not over 65 cents per dozen		Valued at over 65 cents and not over $2.50 per dozen		Valued at over $2.50 per dozen	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Gross		*Gross*		*Gross*		*Gross*	
1926	923	$34,860	48	$176	394	$7,113	481	$27,571
1927	986	41,366	144	622	367	8,061	475	32,683
1928	1,180	58,564	265	1,494	434	9,423	481	47,647
1929	1,951	71,285	294	1,806	851	16,904	806	52,575
1930	1,242	32,958	273	1,164	513	10,117	456	21,677
1931	912	19,895	229	1,494	567	10,123	116	8,278
1932	456	8,239	166	819	243	4,488	47	2,932
1933	3,146	16,845	2,973	12,855	160	2,204	13	1,786
1934:								
January-June	7,716	36,811	7,549	32,724	153	2,209	14	1,878
July	4,198	17,114	4,149	16,487	49	627	----	----
August	951	5,092	917	4,643	32	367	2	82
September	359	2,062	335	1,654	23	354	1	54
October	6,467	29,259	6,461	29,157	6	102	----	----

The table shows a large increase in imports in 1933 and 1934 and a decided shift in those years from goods in the two higher-value brackets (almost entirely spectacles and types of goggles from Europe not included in this investigation) to cheaper lines, consisting almost wholly of sun glasses from Japan.

Inasmuch as the investigation has disclosed practically no imports of glasses valued at more than 65 cents per dozen from Japan, and almost no imports of glasses from any country other than Japan valued at not more than 65 cents per dozen, the following table, showing imports from Japan of all glasses valued at not more than 65 cents per dozen, clearly depicts the growth of the trade in sun glasses. As a rule imports are entered into bonded warehouse and withdrawn only as sold by the importer; hence, inclusion in the table of warehouse stocks shows the relation between total imports and sales to the distributing trade. It appears probable, however, that at least some of the large entries in July and October 1934 were in anticipation of governmental action under section 3 (e). The fact that the main selling season for sun glasses occurs in the spring and summer months lends force to this explanation, particularly of the large entries in October.

TABLE 2.—*Sun glasses with frames of cellulose compounds (celluloid, etc.): Imports from Japan valued at not more than 65 cents per dozen*

Year and month	General imports		Imports for consumption		Stocks in warehouse at end of month	
	Quantity	Value	Quantity	Value	Quantity	Value
	Gross		*Gross*		*Gross*	
1931	48	----	35	----	----	----
1932	85	----	85	$331	----	----
1933						
January	252	$928	252	928	13	$104
February	78	315	79	315	28	143
March	225	801	225	801	----	----
April	322	1,268	323	1,268	----	----
May	213	897	213	897	----	----
June	430	1,732	480	1,916	----	----
Total, January-June	1,520	5,941	1,572	6,125	----	----

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TABLE 2.—*Sun glasses with frames of cellulose compounds (celluloid, e c.): Imports from Japan valued at not more than 65 cents per dozen*—Continued

Year and month	General imports		Imports for consumption		Stocks in warehouse at end of month	
	Quantity	Value	Quantity	Value	Quantity	Value
1933	*Gross*		*Gross*		*Gross*	
July	348	$1,567	348	$1,567		
August	1,590	8,082	582	2,854	1,001	$5,228
September	1,496	6,164	85	335	2,390	10,915
October	1,239	5,430	239	1,078	3,395	15,267
November	982	4,376	105	706	4,271	18,937
December	1,195	5,121			5,460	24,058
Total, July–December	6,850	30,740	1,359	6,540		
Total, 1933	8,370	36,681	2,931	12,665		
1934						
January	791	3,511	528	2,553	5,729	25,016
February	516	2,392	490	2,272	5,755	25,136
March	354	2,018	865	3,991	5,247	23,163
April	1,701	6,860	2,130	8,554	4,785	21,352
May	[1] 2,436	10,325	[1] 1,922	7,754	5,297	23,923
June	1,229	6,195	1,237	5,875	5,289	24,243
Total, January–June	7,027	31,301	7,172	30,999		
July	4,086	16,779	4,028	15,790	5,259	24,761
August	2,860	13,783	804	3,950	7,316	34,594
September	1,094	4,858	22	100	8,337	39,027
October	1,146	5,550	6,461	29,157	3,023	15,420

[1] Corrected for 87½ gross valued at $393 erroneously reported as coming from Czechoslovakia, and for 375 gross valued at $1,567 erroneously reported as not having frames of cellulose compounds.

TABLE 3.—*Sun glasses with frames other than of cellulose compounds: Imports from Japan valued at not more than 65 cents per dozen*

Year and month	General imports		Imports for consumption		Stocks in warehouse at end of month	
	Quantity	Value	Quantity	Value	Quantity	Value
1933	*Gross*		*Gross*		*Gross*	
January					13	$100
February					13	100
March						
April						
May	5	$16	5	$16		
June	2	16	2	16		
Total, January–June	7	32	7	32		
July						
August						
September						
October	3	17				
November						
December						
Total, July–December	3	17				
1934						
January						
February						
March	25	53	12	26	12	27
April					12	27
May	[1] 198	829	[1] 210	855		1
June	156	844	156	844		1
Total, January–June	379	1,726	378	1,725		
July	121	697	121	697		
August	102	637	102	637		
September	313	1,554	313	1,554		
October						

[1] Corrected for 375 gross valued at $1,567 erroneously reported as not having frames of cellulose compounds.

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Character of Imports

Imports of sun glasses consist largely of glasses of the spectacle type with solid front celluloid frames having regular temples and pin hinges. Those with metal frames, consisting entirely of sport glasses, have probably not been imported in excess of 500 gross pairs since 1932. Such glasses sell at retail from 25 cents to 50 cents per pair and are distributed mainly through the jobbing trade.

The type having a celluloid frame is sold largely through chain stores and consists mostly of a black-framed glass with 45 m/m micoquille lenses.

In the first half of 1933, 85 percent of all glasses with celluloid frames imported into New York were within the 10-cent retail price range; 80 percent were within that range in the last half of 1933, but only 54 percent in the 1934 season. Other imports were mainly in the 20- and 25-cent retail price ranges. This pronounced shift may be attributed largely to the increase in the value of the yen, about 40 percent from February to November 1933.

PRODUCTION IN THE UNITED STATES

Detailed information of quantities of sun glasses produced or sold covering separately the first and last 6-month periods of 1933 and the first half of 1934 was obtained from all of the 21 manufacturers in the United States.

The domestic industry making sun glasses is almost entirely separate from the industry which makes spectacles. It operates on a basis of production on orders and makes few sun glasses for stock; in the absence of complete production records the quantity sold is taken to be equivalent to production. The following table, therefore, shows domestic production (or sales) for the three 6-month periods previously mentioned with a classification of the products into various categories determined by physical characteristics and by the usual retail prices at which the articles are sold. The classification by retail price groups is reasonably accurate because most sun glasses are sold in chain stores or other distributing concerns which sell in the usual chain-store price groups. The classification is based upon wholesale prices of not over $9 per gross for 10-cent retail-price items, not over $18 per gross for 20-cent items, and not over $22.50 per gross for 25-cent items. In a few cases these wholesale price criteria were departed from to take care of known special conditions. Although some sun glasses are retailed at 15 cents each, that price category is not important, and as it includes sun glasses ordinarily retailing at 20 cents which are sold under distress conditions, as well as some short-margin 10-cent glasses, no accurate segregation of the 15-cent classification could be made.

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TABLE 4.—*Sun glasses: Production (or sales) by the domestic industry*

Classification	January-June 1933		July-December 1933		January-June 1934		Increase first 6 months 1934 over first 6 months 1933	
	Quantity	Percent of total	Quantity	Percent of total	Quantity	Percent of total		
	Gross		*Gross*		*Gross*		*Gross*	*Percent*
Spectacle type	36,346	75.3	32,477	76.5	49,015	64.4	12,669	34.9
Sport type	5,106	10.6	4,249	10.0	13,286	17.5	8,180	160.2
Slip-ons	5,888	12.2	4,981	11.8	9,198	12.1	3,310	56.2
Undistributed	940	1.9	725	1.7	4,558	6.0	3,618	
Celluloid lenses	226	.4	411	1.0	450	.6	224	99.1
Blown-glass lenses	45,746	94.8	40,673	95.8	72,303	95.1	26,557	58.1
Ground and polished lenses	2,308	4.8	1,348	3.2	3,304	4.3	996	43.2
Celluloid frames	39,602	82.0	32,732	77.1	51,079	67.2	11,477	29.0
Metal frames	8,678	18.0	9,700	22.9	24,978	32.8	16,300	187.8
Retail price of—								
10 cents	11,508	23.8	10,648	25.1	14,014	18.4	2,506	21.8
20 cents	14,869	30.8	13,722	32.3	16,860	22.2	1,991	13.4
25 cents	8,074	16.7	5,410	12.8	15,872	20.9	7,798	96.6
Over 25 cents	13,829	28.7	12,652	29.8	29,311	38.5	15,482	112.0
Total	48,280	100.0	42,432	100.0	76,057	100.0	27,777	57.5

The table shows clearly a marked increase in the proportion of sun glasses with metal frames in the first half of 1934 as compared with the first half of 1933.

Related trends are the increase in glasses of the sport type, most of which have metal frames, and the increases in the price groups valued at 25 cents each and over, as metal frame glasses are never sold at less than 20 cents and seldom at less than 25 cents. Sport glasses with metal frames, which seem to have been in vogue in 1934, usually sell at 35 cents and upward. In fact the most important increase in 1934 over 1933 is in high-priced metal frame sport glasses.

The wholesale value of the domestic output is estimated to have been about $1,700,000 in 1933 and $1,500,000 in the first half of 1934.

The plants producing sun glasses in the United States are relatively small, few of them having over 150 employees in the busy season. The product is made in small lots in a considerable variety so that the use of automatic machinery is limited. Many separate operations are involved, but they are simple and repetitive so that little highly skilled labor is employed.

Most of the manufacturing equipment used in goggle production is light and simple in construction and, with the exception of punch presses and some riveting machines, it has largely been developed and built by the several producers of sun glasses themselves.

Sheet and grooved rod celluloid are purchased ready for fabrication into solid front and rod frames, respectively; the few celluloid lenses used are punched from sheet celluloid by producers of sun glasses; and plain or engraved grooved wire is purchased for metal frames, as are round wire for temples, metal sheet stock for nosepieces, and optical tubing for covering wire temples.

Sun glasses having the frames and temples die cast from cellulose acetate have recently appeared on the market from domestic sources, but are as yet in the experimental stage. Cellulose acetate is hygroscopic and has a marked tendency to warp when exposed to the air.

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If this tendency and the present difficulty of applying a high finish cheaply can be overcome, a greatly lowered level of average costs can be anticipated.

Nearly all blown glass lenses are purchased ready cut, and a few are edged by sun glass producers who also cut some lenses from imported segmental glass.

Sun glasses of the highest quality, those with ground and polished lenses, usually have high-grade optical frames and purchased lenses.

PRODUCTION IN JAPAN

Japan controls the world output of natural camphor, the plasticizer used in celluloid, and has an important celluloid industry.

Sun glasses are made in substantial quantities by the Japanese celluloid industry, but some are also made in small shops not integrated with their raw material supply. Specific data respecting output are not available.

Solid front celluloid frames are reported to be made in Japan by methods which use less sheet celluloid than do the domestic processes but which probably involve so much additional hand labor as to render this type uneconomical to manufacture in the United States where wages are higher.

RELATION OF IMPORTS TO DOMESTIC SALES

Imported sun glasses are usually entered into bonded warehouse, and later withdrawn to fill orders, the importers keeping very small duty-paid stocks on hand. Imports for consumption, which include direct entries and withdrawals from warehouse, therefore closely approximate the quantities actually entering the wholesale market each month.

A comparison of monthly imports for consumption with monthly sales of domestic sun glasses follows. For a few of the domestic producers, who were unable to report quantities sold, it was necessary to estimate the number of gross from the value of sales.

TABLE 5.—*Sun glasses: Relation of imports to domestic sales, by months*

Year and month	Imports for consumption [1]	Sales of domestic sun glasses	Ratio of imports to domestic sales
1933	*Gross*	*Gross*	*Percent*
January	252	5,311	4.7
February	79	5,745	1.4
March	225	6,228	3.6
April	323	7,290	4.4
May	218	9,994	2.2
June	482	13,712	3.5
Total	1,579	48,280	3.3
July	348	14,427	2.4
August	582	8,402	6.9
September	85	5,134	1.7
October	239	4,668	5.1
November	105	4,667	2.2
December	----------	5,134	----------
Total	1,359	42,432	3.2

[1] Imports from Japan valued not more than 65 cents per dozen.

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TABLE 5.—*Sun glasses: Relation of imports to domestic sales, by months*—Con.

Year and month	Imports for consumption	Sales of domestic sun glasses	Ratio of imports to domestic sales
1934	*Gross*	*Gross*	*Percent*
January	528	7,606	6.9
February	490	8,366	5.9
March	877	9,887	8.9
April	2,130	12,169	17.5
May	2,132	15,972	13.3
June	1,393	22,057	6.3
Total	7,550	76,057	9.9

Inasmuch as domestic sales by months were estimated on the basis of monthly sales of only three companies, with allowance for the increased volume in 1934, they are not precise but will serve to indicate the generally increasing ratio of imports.

Making the comparison on the quantity basis, total imports (for consumption) of sun goggles in the first 6 months of 1934 equaled about 10 percent of the total sales of domestic sun goggles and 25 percent of the sales of domestic goggles coming within the same price ranges.

Making the comparison for the same period on the value basis, the total imports were between 4 and 5 percent of total sales of domestic goggles. During this period the total value of sales of domestic sun goggles was $1,500,000, while the value of imports, including the duty and import expenses, was approximately $65,000. The ratio of the value of the imported goggles to the value of the domestic goggles selling in comparable price ranges cannot be stated exactly, but it may be estimated at from 15 to 20 percent.

TREND OF DOMESTIC COSTS UNDER N. R. A.

In making a study of the trend of costs prior to and under the N. R. A., the elements of costs, such as material, labor, etc., were examined separately in detail. Such an analysis of the trends of domestic costs under the N. R. A., however, is limited by the practical impossibility of determining what portion of the increase in cost is directly attributable to operations under the National Industrial Recovery Act, and what portion is not. For example, without making a collateral investigation of the celluloid industry it is not possible to say to what extent the increased prices of celluloid may or may not be due to code compliance and other recovery measures as affecting that industry. Material prices were determined from actual purchase invoices under dates preceding the National Industrial Recovery Act and at various intervals after the code had been put into operation. Pay rolls and piece-rate schedules were analyzed for similar periods to determine the advance in labor costs.

Material Costs

The principal materials used in the production of celluloid sun glasses are colored-glass lenses and sheet celluloid for frames. These materials constitute such a large proportion of the total production

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cost that an examination of the trend in prices and of the conditions under which they are purchased are of prime importance.

Sheet celluloid is available in this country from four large domestic firms which are said to maintain a uniform price and from 6 or 7 smaller concerns which sometimes sell at lower prices, or by importation from Japan or Germany. The 40 cents per pound duty and the comparative disadvantages incident to a remote source of supply, however, have served as effective checks against importation. It is only recently that importers have succeeded in offering a sufficient price advantage to induce certain domestic producers to try out sample shipments of Japanese celluloid.

The celluloid used in the manufacture of sun glasses is of three types—black, shell, and crystal—and of thicknesses from 80/1000 to 175/1000 of an inch. Black celluloid is the type generally used in making the cheap sun glasses comparable with imports from Japan. Information taken from a number of purchase invoices at each of the firms included in the investigation confirmed the data given in the complaint as to prices before and after the code. For the grades used in the production of sun glasses the prices immediately preceding and under the N. R. A. were as follows:

TABLE 6.—*Prices of celluloid*

	Net price per pound		Percent increase under N. R. A.
	Immediately preceding N. R. A.	Under N. R. A.	
Black	$0.40	$0.58½	46
Shell	1.00	1.10	10
Crystal	1.00	1.10	10

Prices of celluloid from Japan for delivery in Mexico were shown to be 24 to 30 cents per pound. Sample shipments of Japanese celluloid were delivered, duty paid, in the United States in 1934 at 50 cents per pound for black and 80 cents for unpolished mottled shell.

The lenses commonly used in sun glasses are cut from blown spheres. Their production in this country was developed as a war industry as a result of the cutting off of supplies from Germany. After the war Germany resumed shipments, and the market was divided between domestic production and importations from that country; imports were originally subject to a duty under the act of 1930 of 1⅞ cents per pound, plus 5 percent. Under Treasury Decision 46276, March 21, 1933, coquille and micoquille colored glass circles not ground or polished were made dutiable at 60 percent instead of 1⅞ cents per pound, plus 5 percent. The effect of this decision was the virtual exclusion of German lenses. The principal lens material imported from Germany at present is segmental glass (pieces of broken blown spheres), from which lenses can be cut as needed. Another recent development is the appearance in the market of Japanese lenses. These, however, are not considered to be of the best quality and so far have made but little headway in competi-

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tion with domestic glass. One of the difficulties in using imported lenses is the necessity for anticipating requirements, as the demand for sizes, shapes, and color shades is constantly shifting. In the United States lenses for sun glasses are produced by only one firm, although it is reported that several glass producers have attempted their manufacture. Their price is uniform to all customers except for quantity discounts, which are more favorable to large users. In explanation of charges by some of the smaller manufacturers of sun glasses that in addition to having to pay a higher net price they are discriminated against in the matter of delivery, it has been pointed out that the preference in deliveries during the busy season is given to those purchasers who are the better credit risks.

Comparative prices immediately prior to and under the N. R. A. for the more generally used sizes and types of lenses required for sun glasses were as follows:

TABLE 7.—*Sun glasses: Prices of lenses*

Type and size	Net price per gross pairs (maximum discount)		Percent increase under N. R. A.
	Immediately prior to N. R. A.	Under N. R. A.	
Coquille:			
45 m/m	$3.07	$3.16	3
40 m/m	2.50	2.65	6
Large sport	[1] 5.68	5.75	1
Micoquille:			
45 m/m	1.85	2.06	11
40 m/m	1.50	1.65	10

[1] This figure has been adjusted from actual invoice price for difference in quantity discount.

Packing materials, also an important element of cost, have been advanced in price. In view of the fact, however, that a considerable proportion of the imported sun glasses are repacked in this country and the packing supplies used by importers are subject to the same price changes, there is some question as to whether the full increase in cost of packing materials should be included in measuring the disadvantage to domestic producers arising from code compliance. Random prices paid for typical packing material immediately prior to and under N. R. A. are given below:

TABLE 8.—*Sun glasses: Prices of packing materials*

Packing material item	Unit	Price		Percent increase under N. R. A.
		Immediately prior to N. R. A.	Under N. R. A.	
Display cards	Each	$0.09	$0.12	33
Cartons for display cards	M	27.00	45.25	68
Transparent envelops	M	.65	.85	31
Boxes for dozen	M	7.00	10.00	43
Shipping cartons	M	56.75	75.00	32

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Labor

In the production of sun glasses, labor constitutes a relatively small proportion of total cost, being considerably less than half that of the materials used in the production of the leading types. The industry uses both the piece-rate and day-rate systems; some firms having predominantly one and some the other. After the adoption of the code, piece-rate systems entailed a guaranteed minimum rate per hour, but indications are that in this industry the piece rates are so adjusted and productive requirements so maintained that payments on the minimum rate per hour basis are exceptional. As a measure of the advance in labor costs, a comparison of the labor charges as applied in the production of specific sun glasses is considered most significant.

Table 9 affords a comparison of the labor costs of producing a sun glass of standard specifications prior to and under N. R. A. The figures shown are simple averages representing a composite of three types of celluloid frame sun glasses within the competitive range as produced by four firms.

TABLE 9.—*Sun glasses: Labor costs*

Detail	Labor cost per gross		Increase under N. R. A.	
	Immediately prior to N. R. A.	Under N. R. A.	Amount per gross	Percent
Fronts	$0.70	$0.91	$0.21	30
Temples	.40	.53	.13	32
Glazing and assembly	.48	.66	.18	38
Packing	.12	.16	.04	33
Total	1.70	2.26	.56	33

Factory Burden, Administrative, and Selling Expenses

The principal items of factory expense are purchased power and the fixed charges of depreciation, etc. As such charges were not advanced under the N. R. A., and as the output of sun glasses has increased since the adoption of the code by all firms whose records were examined, there is reason to believe that an actual decrease in overhead charges has taken place. In view of the impracticability of procuring the accurate production data essential to a complete analysis of overhead charges it may be assumed that there has been little, if any, change in the per gross cost of overhead expense. The few items subject to price advances, such as factory supplies, are of very minor consequence in this industry.

With regard to the general and administrative expense, it may be stated that the salaries paid to officers have been generous, amounting to approximately 9 percent of total gross sales for the four principal producers, or nearly 40 percent of the total of factory labor pay rolls.

Expenses directly chargeable to selling amounting to approximately 5 percent of gross sales for each of the companies have been ignored in making comparisons. In view of the fact that domestic

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producers and importers sell their products to the same trade, any advance in selling expenses experienced by the domestic producers would be offset by a similar increase for the importers. It may be presumed that selling costs have been decreased by reason of the larger volume of business done since the N. R. A.

Summary

In summarizing the trend of domestic costs under the N. R. A., three solid front celluloid sun glasses, representing approximately the 10-, 20-, and 25-cent retail price classes of domestic production, which are most competitive with exports from Japan, have been used. They include (1) a 100/1000 black celluloid frame of the saddle bridge type fitted with 40 m/m micoquille lenses and regular temples with pin hinges, believed to be the only solid front celluloid sun glass now being produced in this country to retail at 10 cents per pair, (2) a sun glass of the same construction as (1) in the 45 m/m lens size, and (3) a 100/1000 mottled shell celluloid frame of the bar-bridge type fitted with 45 m/m coquille lenses and pear-end temples with pin hinges.

The simple average costs before and under the N. R. A. code as compiled from the records of four producers of sun glasses of the above types are given in the following table.

TABLE 10.—*Sun glasses: Comparison of domestic costs prior to and under the N. R. A.*

	Cost of production (per gross)		Increase in cost under N.R.A.	
	Prior to N.R.A.	Under N.R.A.	Amount	Percent
(1) 40 M/M MICOQUILLE LENSES—BLACK CELLULOID SOLID FRONT—REGULAR TEMPLES				
Material:				
Celluloid	$3.30	$4.60	$1.30	39
Lenses	1.61	1.77	.16	10
Packing (bulk)	.28	.35	.07	25
Labor	1.53	2.06	.53	35
Factory expense	.66	.66	(1)	(1)
General and administrative expense	1.09	1.09	(1)	(1)
Total [2]	8.47	10.53	2.06	24
(2) 45 M/M MICOQUILLE LENSES—BLACK CELLULOID SOLID FRONT—REGULAR TEMPLES				
Material:				
Celluloid	$3.60	$5.06	$1.46	41
Lenses	1.94	2.16	.22	11
Packing (bulk)	.28	.35	.07	25
Labor	1.53	2.06	.53	35
Factory expense	.66	.66	(1)	(1)
General and administrative expense	1.19	1.19	(1)	(1)
Total [2]	9.20	11.48	2.28	25

[1] No change.
[2] Does not include selling expenses, which amount to approximately 5 percent of gross selling prices.

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TABLE 10.—*Sun glasses: Comparison of domestic costs prior to and under the N. R. A.*—Continued

	Cost of production (per gross)		Increase in cost under N.R.A.	
	Prior to N.R.A.	Under N.R.A.	Amount	Percent
(3) 45 M/M COQUILLE LENSES—MOTTLED SHELL CELLULOID SOLID FRONT—PEAR END TEMPLES				
Material:				
Celluloid	$10.58	$11.40	$0.82	8
Lenses	3.43	3.32	[3]—.11	[3]—3
Packing (display cards)	1.11	1.62	.51	46
Labor	2.04	2.67	.63	31
Factory expense	.90	.90	(1)	(1)
General and administrative expense	2.68	2.68	(1)	(1)
Total [2]	20.74	22.59	1.85	9

[1] No change.
[2] Does not include selling expenses, which amount to approximately 5 percent of gross selling prices.
[3] Decrease shown results from larger discount obtained by one producer by reason of increased purchases. Actual prices for these lenses were advanced very slightly from the precode base.

TREND OF IMPORT COSTS UNDER N. R. A.

Coincident with the raising of costs of production in the United States under the N. R. A. codes, other recovery activities have tended to increase the costs of importing. The chief item affecting import costs has been the devaluation of dollars in relation to foreign currencies. The depreciation in dollar exchange began in April 1933, considerably in advance of the adoption of the N. R. A. and the code, and continued steadily until November, since when a fairly stable relation has prevailed. The following table shows the movement of Japanese exchange in detail:

TABLE 11.—*Japanese yen exchange rates in cents*

Annual average	1929		46.0997
	1930		49.3898
	1931		48.8509
	1932		28.1112
	1933		25.6457
	1932	1933	1934
By months:			
January	35.9866	20.7393	30.1136
February	34.3233	20.7945	29.7536
March	32.1562	21.2631	30.0093
April	32.8063	22.0867	30.3124
May	31.9730	23.9967	30.2276
June	30.2856	25.7587	29.9041
July	27.4471	28.7727	29.8434
August	24.4944	26.9026	----------
September	23.6314	27.2539	----------
October	23.0628	27.7670	----------
November	20.6218	30.3618	----------
December	20.7298	30.7418	----------

In analyzing the effect of exchange upon competition between imported and domestic sun glasses, two factors should be kept in mind: First, that the upward movement after April 1933 was from a low point and accomplished no more than to offset the yen

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devaluation which had occurred in the last 6 months of 1932, so that yen exchange was on a basis relatively favorable to Japanese imports in July 1934; second, that the costs to the importers were not increased to the full amount of the exchange difference, because Japanese prices in yen were reduced somewhat. Illustrative of the net effect of exchange upon import costs are the following figures which show the trend in yen and dollar prices for two leading types of imported sun glasses. It will be observed that following April 1933 yen prices rose until the latter part of the year, at which time the exchange assumed a degree of stability and the reduction in yen prices took place.

TABLE 12.—*Sun glasses: Trends of yen and dollar prices of sun glasses purchased in Japan*

	Yen price per gross in Japan	Price plus 10 percent commission paid in yen	Exchange rate (FRB averages)	Yen cost converted to dollars	Increase 1934 over early 1933
Item A					
1933:	*Yen*	*Yen*	*Cents*	*Dollars*	*Dollars*
First quarter	12.00	13.20	21.2209	2.80	
Second quarter	12.00	13.20	23.9474	3.16	0.68
Second half	12.75	14.02	28.6333	4.01	
1934: First half	10.54	11.59	30.0534	3.48	
Item B					
1933:					
January-April	15.00	16.50	21.2209	3.50	
May-June	(1)	18.11	23.9474	4.34	
July-August	17.25	18.98	27.8376	5.28	.97
September-December	13.80	15.18	29.0311	4.41	
1934: January-May	(2)	14.85	30.0833	4.47	

[1] Various, av. 16.50.
[2] Various, av. 13.50.

The conclusion indicated by the above examples, considered to be fully representative, is that the net increase in the dollar costs of sun glasses purchased in Japan was between 25 and 30 percent in 1934 as compared with early 1933. In addition to this increase there is an increase in the duty by reason of the higher dollar valuation. This amounts roughly to 10 and 15 cents, respectively, for the examples used so that this net disadvantage to importers by reason of exchange appears to be about 80 cents and $1.15 per gross for the two major items imported. Attention is again directed to the fact that the disadvantage here stated is based upon a measurement of exchange fluctuation from an abnormally low point.

In addition to the disadvantage resulting from exchange, importers' costs were increased to some degree in the same manner as domestic costs by provisions of the National Industrial Recovery Act, as, for example, in wages paid employees in the packing and shipping department and in the prices paid for packing materials.

BALANCING OF DOMESTIC AND IMPORT COST TRENDS UNDER NATIONAL INDUSTRIAL RECOVERY ACT

Comparisons of costs under the National Industrial Recovery Act with those prior to that act for three types of sun glasses which represent that segment of the domestic output which is in direct

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competition with imports show that domestic costs have advanced slightly more than $2 per gross. The summarized figures are as follows:

TABLE 13.—*Sun glasses: Increase in cost of production*

Item	Increase in cost per gross	
	Amount	Percent
No. 1—40 m/m micoquille, black celluloid	$2.06	24
No. 2—45 m/m micoquille, black celluloid	2.28	25
No. 3—45 m/m coquille, shell celluloid	1.85	9

Comparisons of costs of sun glasses imported in 1934 as against those of early 1933 show that taking into consideration the movements of exchange and the counter movements of yen prices in Japan an increase in dollar costs of Japanese sun glasses has occurred. Including the additional duty assessed on the higher dollar value of Japanese goods, the net increases in cost to importers (exclusive of higher costs of doing business in this country) were found to be approximately 80 cents and $1.15 per gross for the two principal items imported.

The figures given as representative of this trend of domestic and import costs do not lend themselves either to separate direct comparisons or to averages. Broadly speaking, therefore, the results of this investigation show that increases in costs of domestic production (under the National Industrial Recovery Act and by reason of code compliance) exceeded the increases in costs to importers under the recovery program by from $1 to $1.25 per gross.

In the following section it will be found that, under the favorable market conditions of the 1933 and 1934 seasons, both domestic producers and importers were able to cover fully their cost increases by advancing prices.

PRICE TRENDS

Prices of sun glasses, both wholesale and retail, are affected by the method of packing, whether in bulk, on individual cards, on display cards having 6 or 12 glasses each, in individual boxes, or in cases. The degree of local competition encountered by retail establishments is also an important factor in determining retail prices. Chain stores can sell for lower prices than other distributing agencies because the jobber's profit is usually eliminated, and the packing is usually cheaper. The above factors affect domestic and imported goods with equal force.

Although, as previously shown, direct costs in the United States increased under the code, a number of other influences have affected prices but without much uniformity. Probably the most important of these has been the popular use of sun glasses for beach and other outdoor activities. The consequent increase in demand has facilitated passing on recent cost increases through higher prices. Another important factor has been the rapid expansion in the production of metal-frame sun glasses with an intensified competition and

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a general lowering of prices in that line. Measured in percentage, metal-frame sport glasses declined about 17 percent in price in 1934 as compared with 1933, while solid-front celluloid-frame sun glasses increased in price about 9 percent. Rod-stock celluloid-frame sun glasses increased 15 percent in price and celluloid-frame sport glasses increased 4 percent. Slip-over glasses remained substantially unchanged, but as that classification is not of great importance, constituting only about 10 percent of the output, and contains both metal and celluloid frames, price comparisons in the group have little significance. The above trends in price are based on the prices and production of all plants investigated in detail and represent about 50 percent of the 1934 output.

The price changes in domestic sun glasses competitive with the imported products are indicated for a number of items in the following table. The products have been grouped into (1) the solid-front celluloid-frame glasses selling in the 10- and 20-cent retail price ranges. Such glasses are comparable in appearance and salability with the imported products although the quality of the domestic glasses is usually superior. (2) Rod stock celluloid-frame glasses selling in the 10-cent price range. These glasses compete in price with about half the imports, but on account of their construction are at a disadvantage.

TABLE 14.—*Sun glasses: Price changes in domestic products competitive with imports*

Item	Price per gross		Sales in 1934	Weighted average price		Difference	
	1933	1934	Gross	1933	1934	Amount	Percent
Solid front 10-cent and 20-cent lines:							
A	$7.20	$7.20					
B	8.40	7.20					
C	9.00	13.00					
D	9.36	12.00					
E	13.20	13.80					
F	13.50	15.75					
G	15.50	17.50					
H	15.00	18.00					
I	17.50	20.00					
Total and average			4,475	$12.36	$14.72	$2.36	19
Rod stock 10-cent lines:							
J	9.00	10.00					
K	8.25	9.00					
L	8.50	9.50					
M	7.38	8.25					
Total and average			3,037	7.56	8.44	.88	12

The items in the table have been selected on the basis of prices in 1934, and it will be apparent from the wholesale prices of the various items that in the case of the solid-front glasses there has been a substantial shift from the 10-cent through the 15-cent to the 20-cent price group in 1934 as compared with 1933. The 15-cent group is used in few chain stores, is relatively small, as previously stated, and is too unstable to be segregated.

With respect to retail price ranges, the Japanese celluloid frame glasses have shown a marked tendency to sell for higher prices in

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1934 than in 1933, as have the domestic. Of all the imports of celluloid frame glasses in New York, 85 percent were within the 10-cent retail price range in the first half of 1933, 80 percent in the last half of 1933, but only 54 percent in the last half of 1934. Nearly all of the remainder have been landed at costs which should permit their sale at 20 cents each retail. With respect to wholesale prices of the Japanese product, one important 10-cent item increased 18 percent in 1934 and the most prominent 20-cent item increased by 5 percent in 1934 as compared with 1933.

O

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UNITED STATES TARIFF COMMISSION

SYNTHETIC CAMPHOR

REPORT TO THE PRESIDENT

ON

THE RELATION OF DOMESTIC PRODUCTION OF SYNTHETIC CAMPHOR TO DOMESTIC CONSUMPTION DURING THE SIX MONTHS' PERIOD ENDED JUNE 17, 1935, AS REQUIRED UNDER THE PROVISIONS OF PARAGRAPH 51 OF THE TARIFF ACT OF 1930

REPORT No. 104

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ROBERT L. O'BRIEN, Chairman
THOMAS WALKER PAGE, Vice Chairman
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RAYMOND B. STEVENS
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LETTER OF TRANSMITTAL

UNITED STATES TARIFF COMMISSION,
Washington, September 9, 1935.

MY DEAR MR. PRESIDENT: I have the honor to transmit herewith the report on the third and last of the three investigations of synthetic camphor required under the provisions of paragraph 51 of the Tariff Act of 1930.

During the 6 months ended June 17, 1935, the period covered by this investigation, the domestic production, by quantity of synthetic camphor greatly exceeded 50 percent of the domestic consumption during that period. No change, accordingly, is found to be necessary under the provisions of paragraph 51 in the rate of 5 cents per pound on synthetic camphor imposed in that paragraph.

Confidential information obtained in this investigation is retained in the Commission's files, subject to transmission, if desired by you.

Respectfully,

ROBERT L. O'BRIEN, *Chairman.*

THE PRESIDENT,
The White House.

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INTRODUCTION

This report on the investigation of the relation of domestic production of synthetic camphor to domestic consumption is the third and final one required under the provisions of paragraph 51 of the Tariff Act of 1930.

The Commission's reports to the President on the first and second investigations were made available to the public in mimeographed form but were not printed. The results of the earlier investigation are stated herein. The findings of the Commission in each of these investigations were approved by the President.

In the preparation of this report the Commission had the services of Dexter North and P. K. Lawrence of the Chemical Division of the Commission's staff, and of others.

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THE RELATION OF PRODUCTION OF SYNTHETIC CAMPHOR TO CONSUMPTION IN THE UNITED STATES

UNITED STATES TARIFF COMMISSION,
Washington, September 9, 1935.

To the PRESIDENT:

The United States Tariff Commission herein reports the results of its third and last investigation of synthetic camphor required under the provisions of paragraph 51 of the Tariff Act of 1930, which reads:

> * * * synthetic camphor, 5 cents per pound. If at the end of three years after the enactment of this Act, the President finds that during the preceding six months the domestic production by quantity of synthetic camphor did not exceed 25 per centum of the domestic consumption thereof by quantity, or, at the end of four years after the enactment of this Act, that during the preceding six months such domestic production did not exceed 30 per centum of such consumption, or, at the end of five years after the enactment of this Act, that during the preceding six months such domestic production did not exceed 50 per centum of such consumption, he shall by proclamation so declare and, after six months thereafter, the rate on synthetic camphor shall be 1 cent per pound. To assist the President in making the investigation required by this provision, the Tariff Commission is empowered to investigate, to such extent as may be necessary, in the manner provided in the case of investigations under section 336 of this Act, and shall report to the President the result of its investigation.

RESULTS OF THE THREE INVESTIGATIONS

Under the provisions of paragraph 51 of the Tariff Act of 1930, the Tariff Commission was required to make three investigations of the relation of the domestic production of synthetic camphor to domestic consumption. The first of these covered the 6 months ended June 17, 1933, and showed that during this period domestic production substantially exceeded 25 percent of the combined consumption of domestic and imported synthetic camphor. In accordance with the provisions of the act, the duty on synthetic camphor therefore remained at 5 cents per pound. The second investigation covered the 6 months ended June 17, 1934, and showed that production greatly exceeded 30 percent of combined domestic consumption; the duty therefore still remained unchanged. The third investigation covered the 6 months ended June 17, 1935, and showed that domestic production greatly exceeded 50 percent of the country's consumption of domestic and imported synthetic camphor. Since this is the final 6-month probationary period, the duty on synthetic camphor will remain at 5 cents per pound, unless or until there is a change in the law.

SCOPE OF THE INVESTIGATIONS

In the course of each of its three investigations the Commission obtained from domestic producers and from importers and con-

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sumers of synthetic camphor statistics with respect to their monthly trade in this commodity for the 6-month periods ended June 17, 1933, 1934, and 1935, respectively. Because of competition between synthetic and natural BB (crude) camphor, data were also obtained with respect to the imports and the domestic consumption of natural camphor.

HISTORY OF THE DOMESTIC INDUSTRY

Numerous attempts have been made in the last 35 years to manufacture synthetic camphor on a commercial scale in the United States. Probably the earliest of these was in 1900 at Niagara Falls No accurate account of the details of this venture is available, except that the Thurlow process was used. About 1907 unsuccessful attempts were made in Massachusetts and Pennsylvania. In 1918 the du Pont Co. started commercial production at Deepwater Point, N. J., following closely the process described in "Organische-Chemisches Praktikum" by F. Ullmann, page 230. After several years manufacture was abandoned because of excessive costs. About 1922 a large chemical company in the Middle West acquired the rights to a German process, but abandoned the project because it appeared unprofitable under the then prevailing conditions. In 1930 the Belle Chemical Co. at Belleville, N. J., erected a plant and produced synthetic camphor for a short time. It is estimated that up to 1930 about $3,000,000 had been spent by various manufacturers for research, plant, and contract obligations which did not result in the successful establishment of a domestic synthetic camphor industry. Early in 1930 the Newport Co. initiated a research program looking toward outlets for wood turpentine. This work led to the development of a process for the synthesis of camphor. In 1931 the du Pont Co. purchased the chemical business of the Newport Co., including the rights to the synthetic camphor process. After further investigation a plant was built, and operation started in January 1933. While following closely the steps used by European producers, this process was simplified, with the result of more economical production through the application of advanced engineering and operating principles. The commercial success of the industry has been aided by the development of outlets for the disposal of byproducts at fair prices. The output of synthetic camphor at this plant has increased appreciably each year. Late in 1934 another domestic firm began to manufacture synthetic camphor at a plant in New Jersey.

DESCRIPTION AND USES OF SYNTHETIC CAMPHOR

Synthetic camphor is a white, crystalline solid obtained by a complex chemical process. Chemically and physically it is identical with the natural BB (crude) camphor except that it is optically inactive. In the United States both types are used almost entirely as plasticizers in the pyroxylin and safety-glass industries, although the synthetic is preferred for safety-glass sheets because it does not tend to discolor. Increased use of plasticizers, such as tricresyl phosphate and triacetin, the trend to plastics not requiring camphor, such as

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cellulose acetate, and competition from synthetic resins have materially reduced the industrial consumption of camphor in recent years.

DOMESTIC PRODUCTION AND CONSUMPTION

Synthetic Camphor, 6-Month Period Ended June 17, 1935

The domestic production of synthetic camphor in the 6-month period ended June 17, 1935, cannot be shown, but it substantially exceeded 50 percent of the total domestic consumption.

Statistics of consumption are shown below:

	Pounds
1934: Dec. 18–31	107,692
1935:	
Jan. 1–31	239,800
Feb. 1–28	212,723
Mar. 1–31	152,585
Apr. 1–30	171,687
May 1–31	219,060
June 1–17	65,867
Total	1,169,414

The consumption of 1,169,414 pounds of synthetic camphor in the third and final period of the investigation (Dec. 18, 1934, to June 17, 1935) compares with the consumption of 886,428 pounds in the second period (Dec. 18, 1933, to June 17, 1934), and 397,138 pounds in the first period (Dec. 18, 1932, to June 17, 1933).

Synthetic and Natural BB Camphor, 6-Month Periods, 1931–35

Statistics of domestic consumption of natural BB (crude) camphor were collected for comparison with the figures for synthetic camphor. These data cover the first 6 months of the calendar years, 1931 to 1935, inclusive.

Domestic consumption of synthetic and natural BB (crude) camphor for 6-month periods, 1931–35

Period	Consumption of—		Total consumption synthetic and natural BB (crude) camphor	Ratio of synthetic to total of natural and synthetic
	Synthetic camphor	Natural BB (crude) camphor		
	Pounds	*Pounds*	*Pounds*	*Percent*
Jan. 1–June 30, 1931	1,783,979	600,471	2,384,450	74.8
Jan. 1–June 30, 1932	573,174	1,222,418	1,795,592	31.9
Jan. 1–June 30, 1933	461,170	1,324,690	1,785,860	25.8
Jan. 1–June 30, 1934	807,818	1,487,175	2,294,993	35.2
Jan. 1–June 30, 1935 [1]	1,144,501	1,498,838	2,643,339	43.3

[1] Month of June estimated by consumers.

IMPORTS

Imports of synthetic camphor are almost entirely from Germany and of natural camphor from Japan. The following tables show imports of synthetic and natural BB (crude) camphor since 1928.

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Synthetic camphor: Imports for consumption, 1928–34, and 6 months of 1935

Year	Quantity	Value	Unit value
	Pounds		
1928	2,291,984	$821,652	$0.358
1929	2,774,980	972,135	.350
1930	3,524,990	1,233,715	.350
1931	1,894,016	618,312	.326
1932	1,422,046	394,141	.277
1933	891,051	220,409	.247
1934 [1]	658,842	258,466	.392
1935 (6 months) [1]	453,212	172,183	.380

[1] Preliminary.

Source: Foreign Commerce and Navigation, Dept. of Commerce.

Natural crude camphor: Imports for consumption, 1928–34, and 6 months of 1935

Year	Quantity	Value	Unit value
	Pounds		
1928	4,384,661	$1,658,769	$0.378
1929	4,203,795	1,579,562	.376
1930	1,058,213	419,229	.396
1931	2,003,875	714,137	.356
1932	1,799,291	512,993	.285
1933	1,989,288	411,126	.207
1934 [1]	2,662,714	646,023	.243
1935 (6 months) [1]	896,960	244,415	.272

[1] Preliminary.

Source: Foreign Commerce and Navigation, Dept. of Commerce.

FOREIGN PRODUCTION

Germany is the world's principal producer of synthetic camphor and Japan is practically the only producer of natural camphor.

Synthetic Camphor

Germany.—Schering-Kahlbaum, a subsidiary of the Kokswerke and Chemische Fabriken A. G. of Berlin, is probably the world's largest producer of synthetic camphor. Installed capacity in Germany is estimated at 13,000,000 pounds annually. Production is said to have declined from capacity output in 1929 to 9.000,000 pounds in 1932 and to 6,000,000 pounds in 1933.

Exports of synthetic camphor from Germany to leading markets are shown in the table below:

Synthetic camphor: [1] *Exports from Germany to principal countries in recent years*

[Pounds]

Destination	1929	1931	1933	1934
United States	3,980,025	1,666,980	731,927	1,067,026
Italy	37,485	72,765	211,642	630,516
France	679,140	452,025	427,692	462,966
Great Britain	246,960	238,140	460,761	791,451
Switzerland	423,360	310,905	147,708	178,573
Soviet Union	293,265	299,880	74,956	85,979
British India	520,380	659,295	447,534	738,541
All other countries	542,430	438,795	493,831	520,286
Total quantity	6,723,045	4,138,785	2,996,051	4,475,338
Total value (Reichsmarks)	10,714,600	6,258,000	2,913,000	3,384,000
Total value (U. S. dollars)	2,549,932	1,489,404	888,986	1,332,453
Average value per pound	$0.379	$0.360	$0.297	$0.298

[1] Classified in official trade statistics as camphor; manna.

Source: American Consul, Frankfort-on-Main, Germany; official trade statistics for Germany 1933 and 1934.

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Other countries.—Italy started production of synthetic camphor in 1925. The present plant capacity is about 3,500,000 pounds annually. Production is estimated at 760,000 pounds in 1930; 1,300,000 pounds in 1931; and approximately the same amount in 1932. About 50 percent of the production is exported.

France has an installed capacity of about 1,500,000 pounds annually. Production in 1931 and 1932 is estimated at 1,102,500 pounds annually.

The production in 1931 and 1932 in Switzerland is reported to have been about 650,000 pounds annually.

The installed capacity of the Soviet Union is reported to be 880,000 pounds annually.

Recent statistics on production in these countries are not available.

Natural Camphor

Japan.—The production of natural camphor is a Japanese monopoly. It is obtained by distilling the wood of an evergreen tree of the laurel family (*Cinnamonium camphora*) found in Formosa, Japan proper, and southern China. The Japanese Government and the colonial government of Formosa control processes, quantity and quality of production, and sales and prices, by decrees and regulations issued from time to time. This control is exercised by the Bureau of Monopolies at Tokyo, a division of the Department of Finance. The monopoly in Formosa, the principal producing area, has been exercised since 1899. Since April 1919 the only producer in Formosa has been the Formosan Camphor Producing Co., Ltd. The Japan Camphor Co., Ltd., of Kobe has been the sole refiner, sales agent, and exporter of crude and refined camphor and camphor oils from the Empire of Japan since February 1918.

The following table shows exports of natural camphor (all grades) from Japan to leading countries.

Natural camphor: Exports of all grades to principal countries in recent years

[Pounds]

Destination	1929	1931	1932	1933	1934	1935 (Jan.–May)
United States	3,075,540	1,360,060	1,071,200	1,202,890	1,284,530	565,230
British India	1,175,590	572,000	814,970	1,149,590	1,194,830	562,510
Straits Settlements	60,190	26,390	27,820	20,670	29,250	22,360
Great Britain	59,670	129,090	208,910	177,060	126,880	64,610
France	428,610	92,300	193,310	292,630	274,950	133,380
Germany	138,450	39,390	16,770	22,360	67,600	34,060
Australia	112,710	65,910	101,270	54,990	77,090	36,140
Other countries	356,200	647,270	619,710	668,330	580,190	208,130
Total	5,406,960	2,932,410	3,053,960	3,588,520	3,635,320	1,626,430
Total value (yen)	6,199,449	2,944,609	3,541,042	4,445,108	4,603,224	2,188,727
Total value (U. S. dollars)	2,857,946	1,439,914	995,033	1,137,948	1,367,158	634,731
Average value per pound	$0.529	$0.491	$0.326	$0.317	$0.376	$0.390

Source: The Foreign Trade of Japan, Department of Finance, Tokyo.

Respectfully submitted.

ROBERT L. O'BRIEN,
Chairman.
THOMAS WALKER PAGE,
Vice Chairman.
EDGAR B. BROSSARD,
OSCAR B. RYDER,
Commissioners.

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UNITED STATES TARIFF COMMISSION
WASHINGTON

RECENT DEVELOPMENTS IN THE FOREIGN TRADE OF JAPAN

Particularly in Relation to the Trade of the United States

Report under the General Provisions of Section 332
Part II, Title III, of the Tariff Act of 1930

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SECOND SERIES

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INTRODUCTION

The Tariff Commission published surveys of the foreign trade of Japan in 1918 and in 1922. On account of the important changes that have recently occurred in Japan's position in world trade and the widespread attention that some aspects of Japan's trade have attracted, it has been considered desirable to issue the present report.

This report is divided into two principal sections. Part I is a general study of Japan's foreign trade in recent years, especially of the changes in that trade most directly affecting the industry and trade of the United States. Part II is a detailed analysis of United States imports from Japan in the period 1929 through the first 8 months of 1935.

In the preparation of part I of this report, the Commission had the services of L. A. Morrison and B. D. Dorfman and others of the Commission's staff. Practically the entire commodity and statistical staff assisted in the preparation of part II and the appendixes to part I.

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PART I

FOREIGN TRADE OF JAPAN IN RECENT YEARS PARTICULARLY WITH THE UNITED STATES—GENERAL

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PART I.—FOREIGN TRADE OF JAPAN IN RECENT YEARS PARTICULARLY WITH THE UNITED STATES—GENERAL

1. SUMMARY

A. Recent Changes in Japanese Foreign Trade

General Position of Japan in Foreign Trade.

The yen values of both the exports and the imports of Japan fell sharply in 1930 and 1931. In each of the next 3 years the figures increased greatly and in 1934 were above the levels of 1929. Statistics for the first three quarters indicate a still further increase in 1935.

Foreign trade of Japan

[Values in millions of yen]

	Exports	Imports	Excess of imports	Yen—United States dollar exchange rate
				Cents per yen
1924-28 (average)	2,024	2,356	332	44.63
1929	2,149	2,216	68	46.10
1930	1,470	1,546	76	49.39
1931	1,147	1,236	89	48.85
1932	1,410	1,431	21	28.11
1933	1,861	1,917	56	25.65
1934	2,172	2,283	111	29.72
January-September—				
1934	1,564	1,667	103	29.99
1935	1,822	1,838	16	28.71

The decreases in the figures for both exports and imports in 1930 and 1931 were in considerable part due to falling yen prices. On the other hand, the increases in Japan's foreign trade, both export and import, since 1931 have been in part due to advances in yen prices attributable chiefly to the marked depreciation in the foreign exchange value of the yen beginning in December 1931. This factor has been of most importance in the case of imports inasmuch as the yen prices of goods imported into Japan have risen more quickly and more nearly in proportion to the fall in the foreign value of the yen than have the yen prices of Japanese exports.

It seems apparent that, after falling in 1930 and 1931 below the level of 1929, the volume of Japan's export trade has increased rapidly in the last few years. In terms of quantity, that country's import trade followed a similar course, though the increase since 1931 has been much smaller in imports than in exports. An approximate comparison of the quantities of Japan's export and import trade in 1929 and 1934 is afforded by quantum indices given in the League of Nations Review of World Trade. These indices indicate that the volume of Japan's

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export trade was about 48 percent greater in 1934 than in 1929, and that the volume of her import trade was about 9 percent greater.

According to estimates of the League of Nations, Japan's share of world export trade in terms of gold value rose from 2.93 percent in 1929 to 3.32 percent in 1934, while her share of world import trade rose from 2.80 percent to 3.31 percent. It appears certain that in terms of quantity Japan's proportion of total world export trade has risen more sharply than indicated by the value comparison. The yen has depreciated in exchange value more than other important currencies and as a result, prices of Japan's exports, in terms of gold, have fallen relative to the average prices of exports of all countries.

Recent Changes in Japan's Export Trade.

Raw silk was, for a long time, the most important item in Japan's export trade, but the yen value of the country's exports of this commodity has fallen decidedly in recent years chiefly because of the marked fall in raw silk prices, even in terms of yen. The increase from 1929 to 1934 in the yen value of Japan's total exports, occurring in spite of a nearly 500-million-yen decrease in the value of raw silk exports, reflects a very much greater increase in exports other than raw silk. This increase has attracted the more attention because it has been largely in goods and to markets in which Japanese exports had not formerly been a major factor. The following table shows the quantity and the aggregate and unit value of Japan's exports of raw silk, also the aggregate value of the country's exports of all other commodities combined:

Japan's exports of raw silk and all other goods

	Raw silk			All other goods
	Quantity in millions of kin [1]	Value in millions of yen [2]	Unit value, yen per kin	Value in millions of yen
1924–28 average	46	755	16.6	1,270
1929	58	784	13.5	1,365
1930	48	419	8.7	1,051
1931	56	357	6.4	790
1932	55	383	7.0	1,027
1933	48	391	8.1	1,470
1934	51	287	5.6	1,885
January–September—				
1934	38	215	5.7	1,349
1935	41	265	6.5	1,557

[1] 1 kin=1.3228 pounds.
[2] 1 yen equaled $0.446 in 1929 and $0.297 in 1934.

The prices in yen of Japanese exports other than raw silk are still, on the average, substantially lower than they were in 1929, but they have undoubtedly risen since Japan abandoned the gold standard toward the end of 1931. Comparing 1929 and 1934, therefore, the increase in the quantity of this trade was considerably greater than the increase in the yen value. On the other hand, comparing 1931 with 1934, the quantity increase has been somewhat less than the increase in value.

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The most notable recent increases in Japan's export trade have been in cotton textiles; by 1934 exports of cotton cloth alone had come to exceed in value exports of raw silk. Important increases also occurred in exports of other textile manufactures, and in pottery, drugs, tinned and bottled foods, rubber-soled shoes, toys, bicycles, certain types of machinery, and other metal manufactures (principally small articles).

Recent Changes in Japan's Import Trade.

The expansion of Japanese manufacture for export has been, to a considerable extent, in commodities part or all of the materials for which must be imported into Japan. In consequence, Japanese imports of a number of materials have increased considerably in recent years. This is notably true of raw cotton which had long been the most important item in Japan's import trade. A large part, about 43 percent, of the growth in the value of Japan's imports in 1934 over 1931 is attributable to the increase in the value of imports of raw cotton. The following table shows the quantity and the aggregate and unit value of Japan's imports of raw cotton, also the aggregate value of the country's imports of all other commodities combined.

Japan's imports of raw cotton and all other goods

	Raw cotton			All other goods
	Quantity in millions of kin [1]	Value in millions of yen [2]	Unit value, yen per kin	Value in millions of yen
1924–28 (average)	1,065	686	0.64	1,670
1929	1,079	573	.53	1,643
1930	957	362	.38	1,184
1931	1,116	296	.27	940
1932	1,274	447	.35	984
1933	1,249	605	.48	1,312
1934	1,355	731	.54	1,552
January–September—				
1934	1,059	550	.52	1,117
1935	938	546	.58	1,292

[1] 1 kin=1.3228 pounds.
[2] 1 yen equaled $0.446 in 1929 and $0.297 in 1934.

In yen value, imports of raw cotton into Japan rose about 150 percent between 1931 and 1934. In quantity, however, the increase between the 2 years was only about 21 percent. Compared with the average for the 5 years immediately preceding the depression, the quantity of raw cotton imported in 1934 was 27 percent greater.

Substantial increases have also occurred in imports of a number of other materials for use in Japanese manufacture, notably crude and semimanufactured metals, wood pulp, and rubber. But increasing imports have not been confined to such materials; important increases have also occurred in the imports of some manufactured goods including automobile parts and metalworking and woodworking machinery. On the other hand, there has been a considerable decrease since 1929 in Japan's imports of a number of articles, including certain kinds of wood, woolen cloth, white rice, sugar, and spinning machines.

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Factors Contributing to the Recent Expansion of Japan's Export Trade.

(*a*) The circumstances most immediately and directly contributing to the recent expansion of Japan's exports were the abandonment of the gold standard toward the end of 1931, the low foreign exchange value of the yen that has since prevailed, and the consequent low prices of Japanese goods in terms of foreign currencies. Only in part have the resulting competitive advantages to Japanese enterprises in foreign markets been lost through subsequent increases in costs of production in Japan. The prices of various imported raw materials in terms of yen rose as a result of the fall in the foreign exchange value of Japanese currency, but other costs of Japanese industry responded less readily, if at all, to the currency depreciation. Because the needs of Japanese workers are largely supplied by products of Japanese origin, the living costs of Japanese workers did not rise much as a result of the yen depreciation, and factory wage rates in yen have even fallen somewhat since 1931.

(*b*) Over a long period, the increasing population of Japan has tended to keep wages low in spite of substantial advances in the efficiency of Japanese industry. The pressure of new workers seeking employment has been a factor operating to promote the expansion of Japanese exports, especially since Japan is a country of large population relative to physical resources, and since, therefore, the exploitation of the country's already intensively utilized resources offers a rather inelastic field of employment. Thus, the tendency has been for the processing of raw materials to provide occupations for an increasing part of the growing labor force. Many of these materials have been imported in increasing quantities and have had to be paid for by increased exports of manufactured goods.

(*c*) The marked decline in the price of raw silk in recent years has severely reduced the incomes of the Japanese rural population and has increased the pressure on laborers to seek employment in other industries. Falling silk prices have thus tended to depress the level of wages in Japan and to increase the competitive strength of Japanese enterprises in foreign markets.

(*d*) Under the influence of a national movement, known as rationalization, there has been a great improvement in the space of a few years in the equipment and technique of most Japanese industries conducted on a large scale. As a result, costs in such industries have been much reduced. A large part of Japanese manufacturing, however, is still conducted in small establishments or in homes. Even in industries so conducted costs have been reduced by improved organization of purchasing raw materials and marketing products.

(*e*) The expansion of Japanese exports in recent years has been stimulated by the military and investment expenditures in North China. In part, these expenditures have been sustained by increased exports to the same region, but, in part, they have had to be supported by exports to other countries.

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B. Trade of the United States with Japan

Importance of United States-Japanese Trade Relative to the Total Foreign Trade of the Two Countries.

In recent years Japan has ranked next to the United Kingdom and Canada as a market for exports from the United States, and second only to Canada as a source of United States imports. The proportion of United States exports taken by Japan increased from 5 percent in 1929 to 10 percent in 1934, owing to the fact that Japan's purchases of a number of American products, notably raw cotton, were increased or maintained while purchases of our products by other countries decreased. On the other hand, the share of United States imports supplied by Japan fell from 10 percent in 1929 to 7 percent in 1934. This decline was due partly, if not wholly, to the greater fall in the dollar prices of goods imported from Japan, especially raw silk, than in the average dollar prices of goods imported from other countries.

The United States has been even more important in Japan's trade than Japan has been in United States trade. We have for a long time taken more of Japan's exports than has any other country and in recent years have also been the most important source of Japan's imports. However, our share in Japan's export trade fell from 45 percent in 1929 to 18 percent in 1934, the decline being due principally to the greater fall in the price of Japanese raw silk, which goes chiefly to the United States, than in the average prices of Japan's exports. On the other hand the proportion of Japan's total imports coming from the United States rose from 30 percent in 1929 to 33 percent in 1934.

Japan's Balance of Trade With the United States and With all Other Countries.

Although Japan's balance of trade with all countries combined has not greatly changed since 1929, the status of her balance of trade with the United States and her balance with the rest of the world has been reversed. Prior to 1932 Japan's exports to the United States exceeded her imports from this country; she had thus a credit (favorable) balance in this trade, whereas there was a debit (unfavorable) balance in her trade with the rest of the world. Since that year Japan has had a debit balance with the United States and a credit balance with all other countries combined. According to Japanese statistics, imports from the United States in 1934 exceeded exports to the United States in the ratio of about 1.9 to 1, and, roughly, the same situation appears in United States figures. The chief factors contributing to this reversal of Japan's trade balances with the United States and with all other countries combined were (*a*) the fall in the price of raw silk, (*b*) the expansion of Japan's exports of commodities for which other countries offered better markets than the United States, and (*c*) the fact that much of the expansion of Japan's exports in recent years has been in products made from materials of which the United States is a major supplier, notably raw cotton.

The following table shows Japanese statistics of trade with the United States and with all other countries combined. United States statistics would disclose roughly the same changes in balances of trade between this country and Japan as are shown in the Japanese statistics.

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Foreign trade of Japan with the United States and with all other countries combined
[In millions of yen]

	Trade with the United States			Trade with all other countries			Percent of trade with the United States	
	Exports from Japan	Imports into Japan	Excess of exports (+) imports (−)	Exports from Japan	Imports into Japan	Excess of exports (+) imports (−)	Exports	Imports
1924–28 (average)	854	663	+191	1,170	1,693	−522	42	28
1929	914	654	+260	1,235	1,562	−327	42	29
1930	506	443	+63	964	1,103	−139	34	29
1931	425	342	+83	722	894	−172	37	28
1932	445	510	−65	965	921	+44	32	36
1933	492	621	−129	1,369	1,296	+73	26	32
1934	399	769	−370	1,773	1,514	+259	18	34
9 months ending September:								
1934	293	530	−237	1,271	1,137	+134	19	32
1935	374	607	−233	1,448	1,231	+217	20	33

Raw Silk and Raw Cotton in the Trade Between the United States and Japan.

Raw silk has been much the most important item of the United States imports from Japan. Raw cotton has held a similar though not as predominant a position in the United States export trade to Japan. In the predepression period American imports of Japanese raw silk were usually valued at about three times as much as Japan's imports of American raw cotton. In 1933 the two were almost equal, and in 1934 the figure for cotton exceeded considerably that for the raw silk trade. However, in the first 9 months of 1935 the imports of Japanese raw silk into the United States were greater than they were in the corresponding months of 1934, while our exports of raw cotton to Japan were considerably smaller.

The changes in the raw-silk trade have been responsible for much the larger part of the variations in the total value of our imports from Japan, and the changes in the raw-cotton trade have been responsible for a substantial part of the variations in the total value of our exports to Japan. For this reason some of the aspects of recent changes in the trade between the United States and Japan may be better grasped if the figures for raw silk on the one hand and for raw cotton on the other are distinguished from the values for all other commodities. The data on the basis of United States statistics are shown in the following table.

Trade of the United States with Japan: Raw silk and raw cotton shown separately from all other commodities (United States statistics)
[Values in millions of dollars]

	Imports from Japan				Exports to Japan				Yen-United States dollar exchange
	Total	Raw silk		All other commodities	Total	Raw cotton		All other commodities	
		Quantity	Value			Quantity	Value		
		Million pounds				*Million pounds*			*Cents per yen*
1924–28 (average)	382	55	317	65	257	574	115	142	44.63
1929	432	70	356	76	259	567	109	150	46.10
1930	279	60	221	58	165	470	66	99	49.39
1931	206	70	163	43	156	914	80	76	48.85
1932	134	69	106	28	135	1,178	86	49	28.11
1933	128	60	92	36	143	950	87	56	25.65
1934	119	55	70	49	210	906	112	98	29.72
January–September:									
1934	90	41	54	36	137	552	66	71	29.99
1935	108	47	62	46	133	419	53	80	28.71

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The change in recent years in the relative values of our imports of raw silk from Japan and of our exports of raw cotton to Japan have resulted in large part from the different movements in the prices of the two commodities. Prices of raw silk fell drastically after 1929, as did those of raw cotton; after 1932, however, the price of raw silk in terms of dollars continued to decline while the dollar price of raw cotton rose considerably above the level of 1932. In 1929 raw silk was worth about 26 times as much per pound as raw cotton and in 1934 only about 10 times as much. However, the changes in the values of imports of raw silk from Japan and of exports of raw cotton to that country in 1934 as compared with 1929 have been affected, not only by changes in prices, but also by the fact that the volume of imports of raw silk was at a lower level and the volume of imports of raw cotton was at a higher level in the later than in the earlier year.

In contrast to our export trade in raw cotton with Japan, our recent exports of raw cotton to most other countries have been much smaller in quantity than in the years preceding the depression. Japan now ranks much above any other country as an export market for United States cotton.

Trade Between the United States and Japan in Commodities Other Than Raw Silk and Raw Cotton.

As indicated in the above table, American exports to Japan exclusive of raw cotton have regularly exceeded in value American imports from Japan exclusive of raw silk. Excluding cotton, our exports to Japan, in dollar value, declined steadily from 1929 to 1932, rose moderately in 1933, sharply in 1934, and again considerably in 1935. The value of imports from Japan other than raw silk showed substantially a similar course, but the great decline in the import values as between 1931 and 1932 require interpretation because the unit values of the commodities in terms of dollars were affected by the sharp depreciation of the yen from an average of 48.85 cents to an average of 28.11 cents.

Between 1932 and 1934, the dollar value of imports other than raw silk into the United States from Japan increased 75 percent as the result of increases in the prices of many of the commodities involved, and of a substantial increase in the quantities of Japanese goods imported. However, this increase was much less than the increase in the value of United States exports to Japan exclusive of cotton. This statement holds both as to the absolute and the percentage increases.

Because of the effect of the decline of the dollar prices of Japanese goods in 1932 accompanying the sharp fall in the foreign exchange value of the yen, it seems probable that, in comparing the trade of all later years with 1931, the yen figures for Japanese exports to the United States give a better indication of the quantitative changes in this trade than do the dollar figures for the corresponding United States imports. For this reason and in order to show the trade from the standpoint of Japan, the yen values of Japanese exports to and imports from the United States, exclusive of raw silk and raw cotton, are shown below. The yen figures for imports into Japan from the United States in 1932 and all later years were greatly increased as a result of yen depreciation and the consequent high yen prices of

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American goods. The dollar figures probably more nearly reflect the change in the volume of this trade in 1932 and later years as compared with 1931 than do the yen values of the corresponding exports from Japan.

Trade of Japan with the United States exclusive of raw silk and raw cotton (Japanese statistics)

[In millions of yen]

	Total value of exports from Japan to the United States, excluding raw silk	Total value of imports into Japan from the United States, excluding raw cotton
1924-28 (average)	141	369
1929	156	378
1930	106	266
1931	81	188
1932	85	189
1933	136	239
1934	155	368
January to September—		
1934	114	252
1935	148	330

Duty Free and Dutiable Imports Into the United States From Japan.

Much the greater part of our imports from Japan, in terms of value, consists of goods free of duty. Apart from raw silk, which alone has accounted for between about three-fifths and four-fifths of our imports from Japan, several other important Japanese articles enter this country free of duty. These include tea, pyrethrum, perilla oil, certain undressed furs, and several fertilizer materials. Most of these free items are either materials used by American industries or are commodities not produced in the United States; several of them possess both these characteristics.

On the other hand, the bulk of the dutiable imports from Japan consists of articles of the same general types as are produced in the United States, although the domestic product is frequently of different variety or grade from the Japanese.

The following table shows the recent changes in imports of duty-free and dutiable articles from Japan. As with other general statistics of imports from Japan, the great decline in the value of imports of dutiable commodities in 1932 as compared with 1931 was chiefly, possibly wholly, due to the devaluation of the yen and its effect on the unit prices of Japanese goods in terms of dollars.

Imports of duty-free and dutiable goods into the United States from Japan

	1928	1929	1930	1931	1932	1933	1934	1935 (January-September)
Total (millions)[1]	$384	$432	$279	$206	$134	$128	$118	$106
Duty-free (millions)[1]	$339	$378	$239	$174	$115	$102	$84	$75
Percent of total	88.3	87.5	85.7	84.5	85.8	79.7	71.2	70.8
Dutiable (millions)[1]	$45	$54	$40	$32	$19	$26	$34	$31
Percent of total	11.7	12.5	14.3	15.5	14.2	20.3	28.8	29.2

[1] The figures given for all years except 1934 and 1935 are for "general imports"; for 1934 and 1935 the figures are for imports for consumption.

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The dutiable imports from Japan include a great variety of articles no one of which accounts for any large part of the total. Important among them are pottery; fish products, principally canned crab and canned tuna; vegetable products, principally oils, oil cake, and oil-cake meal; textile products, principally cotton floor coverings, cotton cloths of various types, silk and rayon fabrics and silk and rayon wearing apparel; menthol and camphor; various classes of brushes, and handles and backs therefor; certain braids for hatmaking; dolls and toys; and small articles made of papier mâché, cellulose, leather, metal, and wood.

Many of the manufactured goods imported from Japan have consisted of very low-priced grades, sometimes of lower quality than any made in the United States. Even taking grade into account, however, Japanese goods have often been sold in the United States at extremely low prices, made possible largely by the depreciation of the yen. During the depression many consumers have naturally tended to buy lower priced wares where available, and this tendency has helped to maintain or increase imports from Japan. However, these imports have not always displaced equivalent amounts of domestic goods, inasmuch as part of the demand supplied by such imports might have gone unfilled had they not been available at very low prices.

In the last few years the Japanese have begun to export to the American market a good many classes of articles which they had not previously sold here. Apparently the initiative in developing the trade in some of these articles was taken by American dealers. Some of these dealers provided samples and made specifications for manufacture in Japan. There has also been a considerable tendency to shift from Germany to Japan as a source of supply of various novelties and specialties.

Principal Exports to Japan.

Apart from cotton, already discussed, United States exports to Japan include a wide variety of articles, crude, semimanufactured, and manufactured. Exports to Japan of a number of commodities have increased materially since 1929, particularly materials used by expanding Japanese export industries. Among these commodities may be mentioned (apart from cotton) several metal items, crude petroleum, gas and fuel oil, and sulphite wood pulp.

On the other hand, our exports of a considerable number of articles to Japan have been much smaller in the last few years than before the depression, although in general these items show considerable recovery in 1934 and 1935 as compared with 1931 and 1932. For a number of commodities, moreover, our exports to Japan, though less at present than before the depression, have not fallen as much as our exports of the same commodities to other countries. Most of the items which show decreases are highly processed goods, but losses have also been sustained in our sales to Japan of timber, lumber, and unmanufactured tobacco.

Probably some portion of certain materials exported from the United States to Japan would have gone to other countries had they not gone to Japan; but it is reasonable to suppose that some of such goods could not have found outlets elsewhere, or could have found

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them only at lower prices than those at which the goods were sold to Japan. The lower prices at which the Japanese have been able to sell many articles in the production of which American materials have been used have doubtless caused a greater world consumption of these articles, and in turn of the American materials, than would otherwise have occurred.

It is important to recognize that as regards much of the material and equipment we are now sending her, Japan is not entirely dependent on the United States. Japan already imports from other sources large quantities of cotton, petroleum and its products, and crude and semimanufactured metals—products which together accounted for 80 percent of the total value of our exports to Japan in 1934. She can increase the proportion of these articles purchased from other sources. In the case of several important commodities imported by Japan, the proportion supplied by the United States has been maintained or increased in recent years. In some others, however, such as aluminum, leaf tobacco, and wheat, the share of Japanese imports supplied by the United States has decreased. The percentage of raw cotton supplied by this country rose from 1929 to 1932, but has since fallen.

C. United States and Japanese Exports to Third Markets

Among United States exports to third countries, which have met much sharper competition from Japan in recent years than before, are cotton cloth, rubber-soled footwear, tinned fish, electric bulbs and tubes, enameled ware, and cutlery. Of these commodities, cotton cloth, which in 1929 accounted for 1.4 percent and in 1934 for 1.1 percent of total United States exports, is the most important. From 1929 to 1934 there was an increase in Japan's exports of cotton cloth to practically all countries except China and British India. On the other hand, there was a decline from 1929 to 1932 in United States exports of this commodity to practically all markets, and there has been little, if any, recovery of the losses sustained in the first years of the depression.

For the most part, however, our export commodities are different from those of Japan, and our principal foreign markets are not important markets for Japan. For this reason the expansion of Japan's export trade has not been a major factor affecting the variations in the total trade of the United States in third countries. It has affected principally the exports of countries other than the United States.

The yen value of Japan's exports to all important countries except the United States, Canada (where Japan's trade has never been large), and China was greater in 1934 than in 1929. The decline in exports to China has been due partly to disturbances in that country and partly to boycotts against Japanese goods.

Asia has always been Japan's most important export market; and comparing the value of Japan's exports to different countries in 1934 and 1931, the largest absolute increase has occurred in the trade with Asiatic countries other than China, taken as a group. The greatest percentage increases, however, have occurred in Central and South American countries, but exports to these countries still represent only a small part of Japan's total exports and are still small compared with United States exports to the same countries. Likewise, Japan's

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exports to Europe increased by a considerable percentage during this period, and yet Japan remains an unimportant supplier of the imports of European countries as compared with the United States and other leading commercial countries. Important increases have also occurred in Japan's exports to Africa and to Oceania, in both of which Japan's share of the total import trade is larger than in Europe.

Europe has always been the largest market for American exports, having taken in recent years between 45 and 50 percent of the total. Exports to Canada have represented around 15 percent of total exports. It is in these two great markets that much the larger part of the total loss in American export trade has been sustained, and Japanese exports to these areas have had little to do with this loss. Our exports to Asia, Japan's largest market, have fallen less in percentage than our total exports, even omitting our exports to Japan itself from our exports to Asia.

Japan's exports to Latin-American countries, although they have increased relatively more than her exports to the world as a whole, continue to be only a small fraction of our exports to these countries. The loss in United States trade with these countries has been due principally to exceptional shrinkage in consuming power in South America and to the competition of other countries. Central America, including Mexico and the West Indies, took about the same proportion of our exports in 1934 as in 1929. Our exports to South American countries have fallen more than exports to the world as a whole.

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2. RECENT CHANGES IN JAPAN'S FOREIGN TRADE

Variations in Japan's Imports and Exports in Recent Years.

The yen values of Japan's annual imports and exports for the period 1924–34, together with other statistical data closely related to the country's foreign trade position, are shown in table 1. Both exports and imports declined somewhat from 1925 down through 1928; after showing increases in 1929 they fell sharply in the first 2 years of the depression. Since 1931 they have greatly increased each year.

TABLE 1.—*Foreign trade of Japan and statistics relating thereto*

Year	Exports [1] (millions of yen)	Imports [1] (millions of yen)	Total (millions of yen)	Excess of imports (millions of yen)	Quantum index exports [2]	Quantum index imports [2]	Index of wholesale prices [3]	Yen—United States dollar exchange rate [4]	Gold value of the yen (per centage of parity) [5]	Per capita trade	Population (in thousands)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
								Cents		*Yen*	
1924	1,807	2,453	4,260	646			217.3	41.19	82.63	69.74	61.1
1925	2,306	2,573	4,879	267			212.2	41.04	82.33	78.62	62.0
1926	2,045	2,377	4,422	332			188.2	47.12	94.52	70.10	63.1
1927	1,992	2,179	4,171	187			178.6	47.41	95.11	65.18	64.0
1928	1,972	2,196	4,168	224	100.0	100.0	179.8	46.41	93.10	64.13	65.0
1929	2,149	2,216	4,365	67	109.9	102.2	174.8	46.10	92.48	66.24	65.9
1930	1,470	1,546	3,016	76	102.6	92.1	143.9	49.39	99.08	45.08	66.9
1931	1,147	1,236	2,383	89	105.7	102.1	121.7	48.85	97.99	35.12	67.8
1932	1,410	1,431	2,841	21	125.0	100.9	128.1	28.11	56.39	41.88	68.9
1933	1,861	1,917	3,778	56	138.2	104.7	142.7	25.65	41.52	[6] 54.13	(7)
1934	2,172	2,283	4,455	111	163.3	111.6	141.3	29.72	35.59	[6] 62.91	(7)
9 months ending September—											
1933	1,354	1,424	2,778	70				24.17	41.75		
1934	1,564	1,667	3,131	103				29.99	35.97		
1935	1,822	1,838	3,660	16				28.71	34.14		

[1] Financial and Economic Annual of Japan; Annual Return of the Foreign Trade of Japan. 9 months figures for 1933, 1934, and 1935 from Monthly Return of the Foreign Trade of Japan (September 1935).

[2] League of Nations Review of World Trade for 1933, pp. 74 and 75, and Review of World Trade for 1934, pp. 73 and 79. The indices for 1929 are adjusted from those shown in the League of Nations Review for 1933 in order to put them on the 1928 base. Such indices have not been calculated for years prior to 1928.

These "quantum" indices are the result of an attempt to measure the variations in the weighted average quantities of Japan's imports and exports of different goods—the weighting being made on the basis of the prices of the different goods in a given year (in this case 1928). In other words, the indices are intended to measure the variations in the values of Japan's imports and exports after making corrections for the effects of price changes on the yen figures. The method used in constructing the indices involved correcting the yen values of Japan's exports and imports in accordance with the variations in the Japanese export and import price indices.

[3] Bank of Japan, index of wholesale prices, base July 1914.

[4] Federal Reserve Bulletin.

[5] Based on quotation of the yen in New York City (noon buying rates for cable transfers) and, in addition for the years 1933 and 1934, on quotations of the dollar on the Paris Bourse.

[6] Calculated on basis of population estimates of 69,800,000 for 1933 and 70,800,000 for 1934.

[7] Official estimates comparable with the above are not yet available.

In all years for which the figures are given Japanese imports exceeded Japanese exports. In general this excess of imports prevailed for a long period prior to 1924. (The country's trade during the years of the World War, 1915 to 1918, provides the most important excep-

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tion to this statement.) From 1925 to 1932 the aggregate value o Japan's imports fell more rapidly than did the value of exports, with a resulting decline in the country's debit balance on merchandise account. From 1932 to 1934 the reverse was true; the value of imports rose more rapidly than that of exports. The country's debit balance on merchandise account was, therefore, increasing in these years. Current reports indicate that the debit balance will probably be less for 1935 than it was for 1934.

In considering the yen value of Japan's foreign trade it should be remembered that after the World War the gold standard was in effect in Japan only from January 1930 to December 1931. The average gold value of the yen in each year 1924–34 is shown in column 9. Since 1931 the foreign exchange value of the yen has been, relative to its parity in the immediately preceding period, lower than that of any other of the world's important currencies.

Variations in the yen value of the country's annual imports and exports are in part attributable to variations in the yen prices of goods imported and exported, and for that reason precise conclusions are not possible regarding fluctuations in the volume of Japanese export and import trade. Variations in the index of Japanese wholesale prices, shown in column 9 of table 1, indicate that the downward trend of the country's exports and imports from 1925 to 1928 was probably more than accounted for by the decline in the yen prices of the goods exported and imported. Thus the trend of the quantities of Japan's outgoing and incoming trade was probably upward in the period immediately preceding the depression. Similarly a large part, or nearly all, of the decline in the yen value of the country's exports and imports in 1930 and 1931 was accounted for by the fall in the prices of the goods.

After 1931 Japan's foreign trade rose sharply. The increases in the quantities of the country's exports and imports during this period, however, have not been as great as the yen figures would suggest. The yen prices of Japanese exports and imports, especially the latter, have risen on the average since Japan abandoned the gold standard at the end of 1931. In general, yen prices of goods imported into Japan responded more quickly and more nearly in proportion to the depreciation of the yen than did the prices of goods exported from Japan. Since 1931, therefore, increases in yen prices account for a greater part of the increase in the yen value of imports than of the increase in the yen value of exports.

The "quantum" indices shown in columns 5 and 6 of table 1 are the results of one method of calculating the average variation in Japanese imports and exports of different goods in recent years. The method used involved adjusting the yen figures to correct for variations in price indices of Japanese exports and imports, and expressing the adjusted figures in percentages of the corresponding figures for 1928. Indices constructed in this way may be regarded as only approximate measures of the increase in the volume of a country's exports and imports. Nevertheless, it is certain that there has been a large increase in the volume of Japan's exports since 1929 and that this increase was accompanied by a smaller, though substantial, increase in the volume of its imports.

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Japan's Share of World Trade.

The recent expansion of Japan's export trade began in a period when the trade of most other countries was continuing to decline. Japan's imports constituted 3.31 percent of world imports in gold value in 1934 as compared with 2.83 percent in 1931 and 2.80 percent in 1929. On the same basis Japan's share of the world's exports was 3.32 percent in 1934 as compared with 2.89 percent in 1931 and 2.93 percent in 1929. If the effects of changes in prices could be eliminated, Japan's share of world export trade no doubt would be found to have risen more sharply, for, with the greater depreciation of the yen than of other important currencies, the prices in terms of gold of Japanese exports have, on the average, fallen more than have the prices of the exports of all countries.

Recent Changes in Japan's Export Trade.

The increase since 1931 in the yen value of Japan's total exports has occurred despite the continued downward movement in the quantity and yen value of exports of raw silk, long the most important Japanese export product. The increase in the yen value of the country's exports other than raw silk, therefore, has been much greater than the figures for the total trade would suggest.

The quantities, and aggregate and unit values in yen, of Japan's exports of raw silk for the years 1924–34 are shown in table 2, together with the aggregate values of the country's exports other than raw silk. The yen prices of the exports other than silk undoubtedly have risen on the average since Japan went off the gold standard toward the end of 1931. The increase in the quantities of such Japanese exports, therefore, has not been as great as the increase in their yen value, but there have been great quantitative increases in Japanese sales in a number of lines. And unlike the raw silk business, in which Japan has long dominated the world market, much of the recently increased exportation has been in lines and to areas in which Japanese exports were formerly not important.

TABLE 2.—*Japan's exports of raw silk and of all other goods*

[Quantity and value in millions; 1 kin=1.3228 pounds]

Year	Value of total exports (yen)	Raw silk						All other goods		
		Quantity		Value			Unit value (yen per kin)	Value		
		Kin	Relative to 1929	Yen	Relative to 1929	Percent of total exports		Yen	Relative to 1929	Percent of total exports
1924	1,807	37	63.8	685	87.4	37.9	18.5	1,122	82.2	62.1
1925	2,306	44	75.9	880	112.2	38.2	20.0	1,426	104.5	61.8
1926	2,045	44	75.9	734	93.6	35.9	16.7	1,311	96.0	64.1
1927	1,992	52	89.7	742	94.6	37.3	14.3	1,250	91.6	62.8
1928	1,972	55	94.8	733	93.5	37.2	13.3	1,239	90.8	62.8
1929	2,149	58	100.0	784	100.0	36.5	13.5	1,365	100.0	63.5
1930	1,470	48	82.8	419	53.4	28.5	8.7	1,051	77.0	71.5
1931	1,147	56	96.6	357	45.5	31.1	6.4	790	57.9	68.9
1932	1,410	55	94.8	383	48.8	27.2	7.0	1,027	75.3	72.8
1933	1,861	48	82.8	391	49.9	21.0	8.1	1,470	107.7	79.0
1934	2,172	51	87.9	287	36.6	13.2	5.6	1,885	138.1	86.8
9 months ending September—										
1933	1,354	37	-------	302	-------	22.3	8.2	1,052	-------	77.7
1934	1,564	38	-------	215	-------	13.7	5.7	1,349	-------	86.3
1935	1,822	41	-------	265	-------	14.5	6.5	1,557	-------	85.5

Source: Annual Return of the Foreign Trade of Japan. 9 months' figures for 1933, 1934, and 1935 from Monthly Return of the Foreign Trade of Japan (September 1935).

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Expansion of Japanese export trade has been most notable in textiles other than raw silk. Statistics of exports of these goods are shown in table 3. The yen values of the exports of all these commodities were much greater in 1934 than in 1931, and it will be noted that for those items for which quantities are given the quantities also were much greater in 1934, although the increases were considerably less in volume than in value. For instance, whereas the yen value of Japan's exports of cotton piece goods, much the most important item, increased 148 percent from 1931 to 1934, the quantity exported rose only 82 percent. In nearly all cases both the quantities and values of Japan's exports of textiles other than raw silk were much greater in 1934 than in the predepression years.

TABLE 3.—*Exports from Japan of important textiles, textile materials, and textile products other than raw silk*

[Value in thousands of yen; 1 kin=1.3228 pounds]

Commodity	1929	1931	1933	1934
Piece goods:				
Cotton:				
Quantity (1,000 square yards)	1,790,763	1,413,782	2,090,238	2,577,264
Value	412,688	198,704	383,215	492,351
Silk: Value	[1] 149,950	43,047	63,545	77,488
Artificial silk: Value	(1)	39,711	77,382	113,484
Wool: Value	4,152	1,394	12,377	29,849
Yarns:				
Cotton:				
Quantity (1,000 kin)	20,220	9,518	14,492	19,453
Value	26,753	8,509	15,712	23,485
Artificial silk:				
Quantity (1,000 kin)	116	1,932	6,697	16,793
Value	183	2,244	9,483	22,400
Woolen and worsted:				
Quantity (1,000 kin)	278	524	2,374	4,440
Value	802	861	5,292	12,185
Waste cotton and waste cotton yarn:				
Quantity (1,000 kin)	28,192	14,263	27,540	36,643
Value	5,096	1,580	4,113	6,598
Knit wearing apparel: [2]				
Quantity (1,000 dozens)	12,133	10,414	16,170	17,339
Value	36,085	20,699	40,646	45,508
Handkerchiefs: [3]				
Quantity (1,000 dozens)	2,309	2,001	7,597	9,970
Value	4,978	2,192	6,111	8,368
Clothing and accessories thereof other than those shown above: Value	10,037	10,017	15,831	20,326
Total value above commodities	650,724	328,958	633,707	852,042

[1] "Silk piece goods" includes "artificial silk piece goods" in 1929.
[2] Undershirts and drawers (cotton), gloves, socks, and stockings, silk, and other.
[3] Silk and cotton.

Source: Annual Return of the Foreign Trade of Japan.

Important increases have also occurred in Japan's exports of pottery, drugs, tinned and bottled foods, manufactures of metal, rubber-soled shoes, bicycles, toys, and machinery. Statistics of exports of certain lines of goods in which important increases have occurred are shown in table 4. (Further data regarding Japan's principal exports are given in the appendix table 5, p. 78.)

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TABLE 4.—*Exports from Japan to all countries of important commodities other than textiles in which the trade has increased substantially in recent years*

[Value in thousands of yen; 1 kin=1.3228 pounds]

Commodity	1929	1931	1933	1934
Wheat flour:				
Quantity (1,000 kin)	306,338	225,201	530,425	442,737
Value	26,815	9,517	34,955	28,452
Crab, salmon, and other fish in tins and bottles:				
Quantity (1,000 kin)	38,886	37,362	82,759	86,890
Value	21,677	16,638	41,963	42,528
Boots, shoes, clogs, sandals, etc. (other than leather and rubber boots and shoes and slippers):				
Quantity (1,000 dozens)				2,964
Value	6,787	12,819	19,993	16,018
Pottery: Value	36,962	19,307	35,634	41,877
Machinery and parts and accessories thereof: Value	13,616	13,642	25,855	57,777
Iron manufactures:				
Nails, screws, etc.:				
Quantity (1,000 kin)	4,688	8,352	41,743	61,314
Value	694	640	4,491	6,746
Enameled ware:				
Quantity (1,000 kin)	20,880	10,768	22,901	25,782
Value	6,707	2,698	7,216	8,050
Other: Value	7,792	6,904	15,186	20,480
Iron and semimanufactures of:				
Bars and rods:				
Quantity (1,000 kin)	12,303	38,817	75,217	180,391
Value	991	1,788	4,669	11,505
Other:				
Quantity (1,000 kin)	51,854	84,233	308,980	403,444
Value	4,260	5,622	29,993	41,525
Cycles and parts and accessories thereof (except gum tires): Value	3,429	3,296	12,115	18,904
Electric lamps:				
Quantity (1,000 gross)	672	1,052	1,892	1,572
Value	5,399	5,874	10,167	8,942
Toys (of celluloid, fabrics, metal, pottery, rubber, wood, paper, and other material): Value	13,851	9,819	26,375	30,386
Total, value above commodities	148,980	108,564	268,612	333,190

Source: Annual Return of the Foreign Trade of Japan.

Recent Changes in Japan's Import Trade.

The expansion of Japan's exports since 1931 has had a direct effect on her import trade. This is due to the fact that much of the increased exportation consists of products made from raw materials not produced in Japan. Such is notably true of manufactures of cotton, Japan's exports of which in 1933 almost equaled and in 1934 exceeded in value her exports of raw silk. Japan's exports of artificial silk goods, some chemical products, and metal manufactures are also produced to a large extent from imported materials.

Imports of raw cotton, which long has been the most important commodity in Japan's import trade, have increased materially since 1931 owing to the expansion of that country's cotton manufactures, an increasing part of which has been sold in export markets. Table 5 shows for the years 1924–35 imports of raw cotton in quantity and in yen value (aggregate and unit value), and the yen value of total imports and of imports other than raw cotton. In quantity, the imports of raw cotton into Japan were larger in 1934 than in any predepression year and about 27 percent larger than the annual average for the years immediately preceding the depression. Although the yen value of Japanese imports of cotton in 1934 did not exceed their value in every predepression year, yet their increase in value between 1931 and 1934 accounted for over 40 percent of the increase in the yen value of total imports; also while the quantity of cotton imported was about 21

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percent greater in 1934 than in 1931, the yen value was almost two and one-half times as large as in the later year. The greater increase after 1931 in the value than in the volume of imports of cotton resulted from the rise in cotton prices in terms of the currencies of cotton-producing countries, and the still greater rise in yen cotton prices accompanying the depreciation of the yen.

TABLE 5.—*Japan's imports of raw cotton and of all other goods*

[Quantity and value, in millions; 1 kin=1.3228 pounds]

Year	Value of total imports (yen)	Raw cotton						All other imports		
		Quantity		Value			Unit value (yen per kin)	Value		
		Kin	Relative to 1929	Yen	Relative to 1929	Percent of total imports		Yen	Relative to 1929	Percent of total imports
1924	2,453	812	75.3	605	105.6	24.7	0.75	1,848	112.5	75.3
1925	2,573	1,094	101.4	923	161.1	35.9	.84	1,650	100.4	64.1
1926	2,377	1,165	108.0	726	126.7	30.5	.62	1,651	100.5	69.5
1927	2,179	1,280	118.6	625	109.0	28.7	.49	1,554	94.6	71.3
1928	2,196	976	90.5	550	96.0	25.0	.56	1,646	100.2	75.0
1929	2,216	1,079	100.0	573	100.0	25.9	.53	1,643	100.0	74.1
1930	1,546	957	88.7	362	63.2	23.4	.38	1,184	72.1	76.6
1931	1,236	1,116	103.4	296	51.7	24.0	.27	940	57.2	76.0
1932	1,431	1,274	118.1	447	78.1	31.3	.35	984	59.9	68.8
1933	1,917	1,249	115.8	605	105.6	31.5	.48	1,312	79.9	68.4
1934	2,283	1,355	125.6	731	127.6	32.0	.54	1,552	94.5	68.0
9 months ending September—										
1933	1,424	968	----	461	----	32.4	.48	963	----	67.6
1934	1,667	1,059	----	550	----	33.0	.52	1,117	----	67.0
1935	1,838	938	----	546	----	29.7	.58	1,292	----	70.3

Source: Annual Return of the Foreign Trade of Japan. Nine months' figures for 1933, 1934, and 1935 from Monthly Return of the Foreign Trade of Japan (September 1935).

Among Japanese imports, other than raw cotton, showing notable increases since 1931 are iron scrap and waste, crude petroleum, copper, aluminum, and wood pulp. The details regarding imports of these and a number of other commodities are shown in table 6. (Further data regarding Japan's principal imports are given in appendix table 4, p. 72.)

TABLE 6.—*Imports into Japan from all countries of important commodities in which the trade has increased substantially in recent years*

[Values in 1,000 yen; 1 kin=1.3228 pounds]

Commodity	1929	1931	1933	1934
Fodder:				
Quantity (1,000 kin)	260,380	430,320	608,156	846,636
Value	12,260	11,666	20,761	31,074
Salt:				
Quantity (1,000 kin)	477,680	617,576	1,478,730	1,794,131
Value	4,415	4,280	11,709	14,839
Hides and skins (cow and buffalo):				
Quantity (1,000 kin)	22,945	20,860	29,741	36,738
Value	10,592	5,710	11,709	14,345
India rubber and gutta percha:				
Quantity (1,000 kin)	58,151	73,744	116,550	119,705
Value	33,885	13,183	29,685	57,338
Pulp for papermaking:				
Quantity (1,000 kin)	136,135	170,376	270,837	381,466
Value	13,485	11,840	27,066	44,256
Iron plates and sheets, tinned:				
Quantity (1,000 kin)	135,941	79,582	133,187	146,803
Value	19,921	8,490	22,916	25,698

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TABLE 6.—*Imports into Japan from all countries of important commodities in which the trade has increased substantially in recent years*—Continued

[Values in 1000 yen; 1 kin=1.3228 pounds]

Commodity	1929	1931	1933	1934
Iron waste and old iron:				
Quantity (1,000 kin)	827,426	492,667	1,688,268	2,354,981
Value	18,345	7,321	38,645	65,730
Copper ingots and slabs:				
Quantity (1,000 kin)	8,230	258	22,212	78,317
Value	3,573	78	7,476	26,171
Aluminum ingots, slabs, grains, and others:				
Quantity (1,000 kin)	20,502	8,691	12,065	16,960
Value	11,401	3,312	10,233	12,576
Tin ingots and slabs:				
Quantity (1,000 kin)	9,762	5,337	5,814	6,757
Value	9,202	3,527	10,671	15,317
Nickel ingots and grains:				
Quantity (1,000 kin)	1,233	1,296	5,315	4,367
Value	1,361	1,338	10,905	8,789
Internal combustion engines, weighing not more than 2,500 kilograms:				
Quantity (1,000 kin)	2,038	1,442	4,155	12,229
Value	5,224	5,486	13,955	17,277
Metal or woodworking machinery: Value	5,622	3,069	16,247	21,433
Automobile parts, other than chassis and tires: Value	16,444	9,734	10,883	27,769

Source: Annual Return of the Foreign Trade of Japan.

Recent Changes in the Geographic Distribution of Japan's Foreign Trade.

Tables 7 and 8 show the yen value of Japan's exports to, and imports from, various countries and main geographical areas in each year of the period 1928–34. The most conspicuous changes that have occurred since 1929 in exports from Japan to the various geographical areas are: (1) The decline in exports to North America (principally accounted for by the decline in exports to the United States) and to China (excluding Kwantung leased territory and Manchuria); (2) the increase in exports to Africa, to Latin America, and to Asiatic countries other than China. In exports to all these areas there was a decrease from 1929 to 1931 and a large increase after that year; taking 1931 as a base, there has been a notable increase in Japanese exports to all main geographical areas except North America.

The decrease in exports from Japan to the United States was due chiefly to the fall in the price of raw silk. The decline in exports to China was due primarily to the anti-Japanese boycott precipitated in September 1931. A considerable part of the decrease in the figures for trade with China between 1931 and 1932 is, however, due to the fact that for 1932 and subsequent years trade with Manchuria is not included in the Japanese figures for trade with the rest of China. The expansion of sales in Manchuria in the last few years has resulted chiefly from the increased investments and expenditures that the Japanese have been making in this region.

The most notable recent developments in imports into Japan from various areas have been the increase in its imports from the United States, British India, Egypt, Australia, and a number of other countries from which Japan imports raw materials. In part the increases in the yen figures are attributable to the depreciation of the yen. In imports from the first three countries named, a large part of the increased value is accounted for by the greater volume of imports of raw cotton, and since 1931, by the rise in the price of cotton in cotton-producing countries, particularly in the United States.

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TABLE 7.—*Exports of merchandise from Japan, including reexports, to certain countries and geographic areas*

[Value in millions of yen]

Exported to—	1928		1929		1930		1931		1932		1933		1934	
	Value	Percent of total exports	Value	Percent of total exports	Value	Percent of total exports	Value	Percent of total exports	Value	Percent of total exports	Value	Percent of total exports	Value	Percent of total exports
All countries	1,972	100.0	2,149	100.0	1,470	100.0	1,147	100.0	1,410	100.0	1,861	100.0	2,172	100.0
United States	826	41.9	914	42.5	506	34.4	425	37.1	445	31.6	492	26.4	399	18.4
Other North America, including Mexico	29	1.5	29	1.3	19	1.3	14	1.2	9	.6	8	.4	13	.6
Total, North America	855	43.4	943	43.8	525	35.7	439	38.3	454	32.2	500	26.8	412	19.0
South and Central America and West Indies	25	1.2	28	1.3	20	1.3	13	1.1	18	1.3	45	2.4	101	4.7
Asia:														
China [1]	373	18.9	347	16.1	261	17.8	156	13.6	155	10.9	189	10.3	226	10.3
Kwantung	110	5.6	124	5.8	87	5.9	66	5.7	121	8.6	221	11.9	296	13.6
Philippine Islands	29	1.5	31	1.5	28	1.9	20	1.7	22	1.6	24	1.3	37	1.7
British India and Ceylon	146	7.4	198	9.2	129	8.8	110	9.6	192	13.6	205	11.0	258	11.9
All other	177	9.0	215	10.0	199	13.5	153	13.3	187	13.3	290	15.6	355	16.3
Total, Asia	835	42.4	915	42.6	704	47.9	505	44.0	677	48.0	931	50.1	1,170	53.8
Africa	44	2.2	61	2.8	57	3.9	59	5.1	86	6.1	137	7.4	182	8.4
Europe	160	8.1	147	6.9	128	8.7	104	9.1	127	9.0	182	9.8	228	10.5
Oceania:														
Australia	43	2.2	44	2.1	25	1.7	18	1.6	37	2.6	51	2.7	64	2.9
Other Oceania	10	.5	11	.5	11	.8	9	.8	11	.8	15	.8	15	.7
Total, Oceania	53	2.7	55	2.6	36	2.5	27	2.4	48	3.4	66	3.5	79	3.6

[1] Includes Manchuria reported separately in 1932 and thereafter.

Source: Annual Return of the Foreign Trade of Japan.

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TABLE 8.—*Imports of merchandise into Japan from certain countries and geographic areas*

[Value in millions of yen]

Imported from—	1928		1929		1930		1931		1932		1933		1934	
	Value	Percent of total imports	Value	Percent of total imports	Value	Percent of total imports	Value	Percent of total imports	Value	Percent of total imports	Value	Percent of total imports	Value	Percent of total imports
All countries	2,196	100.0	2,216	100.0	1,546	100.0	1,236	100.0	1,431	100.0	1,917	100.0	2,283	100.0
United States	626	28.5	654	29.5	443	28.7	342	27.7	510	35.6	621	32.4	769	33.7
Other North America, including Mexico	67	3.0	69	3.1	47	3.0	36	2.9	40	2.8	47	2.5	54	2.3
Total, North America	693	31.5	723	32.6	490	31.7	378	30.6	550	38.4	668	34.9	823	36.0
South and Central America and West Indies	14	.6	15	.7	7	.5	7	.6	5	.3	13	.7	25	1.1
Asia:														
China [1]	235	10.7	210	9.5	162	10.5	146	11.8	129	9.0	261	13.6	284	12.5
Kwantung	150	6.8	167	7.5	121	7.8	90	7.3	77	5.4	20	1.0	27	1.2
Philippine Islands	16	.8	18	.8	11	.7	9	.7	10	.7	14	.7	19	.8
British India and Ceylon	285	13.0	288	13.0	180	11.6	133	10.7	117	8.2	205	10.7	292	12.8
All other	217	9.9	175	7.9	158	10.2	116	9.4	119	8.3	158	8.2	190	8.3
Total, Asia	903	41.2	858	38.7	632	40.8	494	39.9	452	31.6	658	34.2	812	35.6
Africa	32	1.5	43	1.9	24	1.6	18	1.5	27	1.9	48	2.5	80	3.5
Europe	404	18.4	420	19.0	280	18.1	200	16.2	225	15.7	283	14.8	296	13.0
Oceania:														
Australia	130	5.9	133	6.0	94	6.1	113	9.1	134	9.4	205	10.7	198	8.7
Other Oceania	6	.3	6	.3	4	.2	5	.4	5	.4	7	.4	16	.7
Total, Oceania	136	6.2	139	6.3	98	6.3	118	9.5	139	9.8	212	11.1	214	9.4
Bonded manufacturing warehouses	14	.6	18	.8	15	1.0	21	1.7	33	2.3	35	1.8	33	1.4

[1] Includes Manchuria reported separately in 1932 and thereafter.

Source: Annual Return of the Foreign Trade of Japan.

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Japan's Balance of Payments in Recent Years.

In an earlier reference to Japan's balance of trade it was pointed out that the value of Japan's imports of commodities has normally exceeded the value of the country's exports. The resulting debit balance on merchandise account has been covered by various factors, such as capital movements and the earnings of the Japanese merchant marine.

A summary of the balance of payments for the Japanese Empire for the years 1927–34 is given in table 9. The data shown are subject to wide margins of error, as is evidenced by the size of the figures in the column showing errors and omissions. It is probable, however, that prior to 1929 there was a considerable net movement of capital into Japan, offsetting net annual debit balances of the country on account of merchandise and gold movements and services. Since 1929 there has been a net outward movement of capital; that is to say, in the years 1929 to 1934 Japan or its nationals were investing in foreign countries, or repurchasing Japanese securities or property formerly owned by foreigners in greater amount than foreigners were investing in Japanese property or securities or purchasing foreign securities from Japanese. But taking the 4 years together, the net outward movement of capital from Japan appears to have been in large part, if not more than, balanced by the country's net exports of gold. Both before and after Japan abandoned the gold standard large quantities of gold were exported from the country in operations designed to maintain or control the foreign exchange value of the yen.

TABLE 9.—*Balance of payments of the Japanese Empire*

[Millions of yen]

Year	Merchandise [1]	Interest and dividends	Shipping freights [2]	Commissions, insurance, brokerage	All other services [3]	Total merchandise and services	Gold	Capital movements [4]	All items (balance represents errors and omissions)
1927									
Credit (exports)	2,106.6	99.6	187.9	96.4	107.1	2,597.6	36.1	323.1	2,956.8
Debit (imports)	2,389.7	102.8	43.2	95.9	107.3	2,738.9	.1	276.6	3,015.6
Balance	−283.1	−3.2	+144.7	+.5	−.2	−141.3	+36.0	+46.5	−58.8
1928									
Credit (exports)	2,077.6	84.0	206.2	110.7	113.6	2,592.1	-------	399.4	2,991.5
Debit (imports)	2,401.0	108.0	47.4	106.0	102.3	2,764.7	.4	282.9	3,048.0
Balance	−323.4	−24.0	+158.8	+4.7	+11.3	−172.6	−.4	+116.5	−56.5

[1] Represents trade (merchandise plus silver coin and bullion) of Japan proper with countries other than Chosen and Taiwan, and trade of Chosen and Taiwan with countries other than Japan proper.

[2] Including ordinary freights, charter money, passage money, port and other transport fees. Japan's imports are valued c. i. f. port of Japan and exports f. o. b. port of Japan; hence, maritime freight on goods imported under the Japanese flag, which is included on the credit side of this item, is also included on the debit side of item 1. Maritime freight on goods imported under other than the Japanese flag are also included on the debit side of item 1. The maritime freight on goods imported under the Japanese flag amounted to approximately as follows (millions of yen): 1927, 78; 1928, 93; 1929, 103; 1930, 69.5; 1931, 58.7.

[3] Including immigrants' and emigrants' funds and remittances; tourists' and diplomatic expenditures; posts, telegraph, telephone, and radio; reparations receipts; and other governmental receipts and expenditures.

[4] Long-term and short-term.

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TABLE 9.—*Balance of payments of the Japanese Empire*—Continued

[Millions of yen]

Year	Merchandise	Interest and dividends	Shipping freights	Commissions, insurance, brokerage	All other services	Total merchandise and services	Gold	Capital movements	All items (balance represents errors and omissions)
1929									
Credit (exports)	2,250.2	102.4	225.9	125.7	125.7	2,829.9	--------	427.2	3,257.1
Debit (imports)	2,414.0	122.2	48.8	117.4	108.6	2,811.0	.5	484.1	3,295.6
Balance	−163.8	−19.8	+177.1	+8.3	+17.1	+18.9	−.5	−56.9	−38.5
1930									
Credit (exports)	1,547.8	90.7	185.0	116.2	106.1	2,045.8	308.6	379.9	2,734.3
Debit (imports)	1,702.5	115.9	41.2	115.9	97.6	2,073.1	21.9	675.3	2,770.3
Balance	−154.7	−25.2	+143.8	+.3	+8.5	−27.3	+286.7	−295.4	−36.0
1931									
Credit (exports)	1,198.7	76.2	160.2	108.8	83.5	1,627.4	419.9	412.4	2,459.7
Debit (imports)	1,340.8	99.8	41.1	105.9	97.3	1,684.9	31.7	726.3	2,442.9
Balance	−142.1	−23.6	+119.1	+2.9	−13.8	−57.5	+388.2	−313.9	+16.8
1932									
Credit (exports)	1,491.7	87.2	173.8	117.3	173.4	2,043.4	112.7	181.7	2,337.8
Debit (imports)	1,548.5	125.0	51.0	108.4	154.1	1,987.0	.7	511.1	2,498.8
Balance	−56.8	−37.8	+122.8	+8.9	+19.3	+56.4	+112.0	−329.4	−161.0
1933									
Credit (exports)	1,939.8	23.8	227.9	117.6	319.8	2,628.9	20.9	293.8	2,943.6
Debit (imports)	2,017.7	138.9	101.9	108.9	227.6	2,595.0	--------	314.8	2,909.8
Balance	−77.9	−115.1	+126.0	+8.7	+92.2	+33.9	+20.9	−21.0	+33.8
1934									
Credit (exports)	2,272.1	22.3	260.6	128.2	366.6	3,049.8	--------	196.7	3,246.5
Debit (imports)	2,401.4	124.1	103.1	113.3	234.7	2,976.6	--------	406.8	3,383.4
Balance	−129.3	−101.8	+157.5	+14.9	+131.9	+73.2	--------	−210.1	−136.9

Source: For the period 1927-32, League of Nations, Balance of Payments, and Financial and Economic Annual of Japan; 1933 and 1934, Oriental Economist (September 1935).

It appears that the earnings of Japan from trade, shipping, and other services had not, up to 1934, provided a substantial surplus for foreign investment or for the repatriation of Japanese securities. Certain large Japanese investors bought foreign securities and Japanese bonds which had been held abroad. And the Japanese Government and a few private companies invested considerable amounts of capital in Manchurian enterprises. The resulting net outward movement of capital, however, appears in the main to have been the exchange of the country's gold monetary and bank reserves for foreign investments or for Japanese property and securities formerly held by foreigners.

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Some Factors Relating to Recent Changes in Japan's Position in Foreign Trade.

The features of the Japanese situation which are most important in the recent expansion of the country's export trade appear to have been the following:

1. The depreciation of the yen.
2. Japanese wages and labor costs.
3. The industrial rationalization movement.
4. The fall in the price of raw silk.
5. Japanese military operations and investments in Asia.

1. *The depreciation of the yen.*—The circumstances most immediately and directly related to the expansion of Japanese exports in recent years were Japan's abandonment of the gold standard in December 1931 and the low foreign-exchange value of the yen that has since prevailed. The fall in the value of the yen in terms of foreign currencies enabled Japanese goods to be sold at lower prices than formerly in foreign markets, while affording the same or higher returns in yen to Japanese exporters. Only a part of this advantage to Japanese enterprises in their competition in foreign markets has been lost through increased costs in Japan. The yen prices of imported materials were increased as a result of the depreciation of the yen, but in many cases even this increase in yen cost did not for a time necessitate increases in the yen prices of Japanese exports made from imported materials. It was only after the considerable stocks of several imported materials bought at predevaluation prices were used up that Japanese exporting interests felt the burden of the rise in the yen prices of imported materials. Other yen costs responded less readily to the foreign exchange depreciation of the yen.

As a result of the fall in the foreign exchange value of the yen, the wages of workers and the labor costs of industry in Japan fell greatly in terms of foreign currency. This factor enhanced the competitive strength of Japanese enterprises in export markets. However, the fall of Japanese wages in terms of foreign currencies has been by no means indicative of a proportionate fall in the real income of Japanese workers. Owing to the fact that the workers' needs are largely met by products of Japanese origin, living costs in Japan rose much less than the foreign exchange value of the yen declined. Retail prices in Japan rose on the average by only about 10 percent between 1931 and 1934. Expressed in yen, the average daily wage rate in Japanese factory industries fell somewhat in the same period, but the average daily earnings of factory workers remained about the same as a result of larger bonuses, overtime, and the like. Thus, the depreciation of the currency did not place serious burdens on Japanese workers although it did improve the competitive position of Japanese exporters.

It is possible, however, to attribute too much importance to the depreciation of the yen as an influence on the recent expansion of Japan's export trade. The abandonment of the gold standard by Japan and the subsequent fluctuations in the foreign exchange value of the country's currency have not been independent of other factors affecting Japan's foreign trade position. If the foreign exchange value of the yen had been maintained at its gold parity, a severe deflation of Japanese prices and wages must perforce have occurred. And if such deflation had gone on long enough and far enough, it would have had in the long run an effect on the competitive position of

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Japanese exporters in foreign markets similar to that of yen depreciation. Deflation of prices and wages in Japan, however, could probably have been effected only slowly and with difficulties for the Government and employers. No doubt, therefore, the fall in the foreign exchange value of the yen resulted in a more abrupt and greater fall in the costs of Japanese industry relative to the costs of industries outside of Japan than would otherwise have occurred. Currency depreciation, therefore, of itself provided a great stimulus to Japanese exports, but developments in the currency situation might have been more quickly and more nearly neutralized by other developments had it not been for the factors described below which were tending to promote the expansion of Japan's export trade. For instance, the fall in Japanese labor costs in terms of foreign currencies resulting from yen depreciation might have been quickly offset by increases in yen wage rates had it not been for more enduring forces which were tending to reduce Japanese labor costs relative to those of other countries.

2. *Japanese wages and labor costs.*—All available information indicates that Japanese daily wage rates are generally much lower than those prevailing in the United States or in most western European countries, although not so low as those prevailing in China, India, and other Asiatic countries. Moreover, the compensation of Japanese workers is not as much lower than that of American workers as the simple comparison of wage rates would suggest. The regular daily wages paid to Japanese factory workers are supplemented to a greater extent than is customary in western industrial countries with annual bonuses, retirement allowances, and provisions for ill health. Certain classes of Japanese workers are provided gratis with dormitory accommodations, meals, entertainment, and at less than cost with a good many other goods from the factory stores. According to estimates of the Tokyo Bureau of the International Labor Office, the aggregate cost of supplementary compensation to Japanese textile, steel, and chemical enterprises amounted to from 30 to 50 percent of the wages paid. Although these percentages are probably much higher than the average for Japanese industry, this factor must be taken into account in comparing wages and labor costs in Japan with those in other countries. But even with allowances for supplementary compensation, wages in Japan are generally much lower than in the United States or than in several European countries.

Japanese workers have a much less expensive standard of living than have the workers of America and western Europe. This is partly because of the simplicity of the tastes of the Japanese working population and partly because the prices of many of the goods required to satisfy these tastes, such as fish, fresh vegetables, and cotton textiles, have been much lower in Japan than in western countries. As a result of these circumstances, Japanese workers have been able to live, without great apparent hardship, on wages that would be intolerable to the workers of western countries.

The customary workday in Japan is somewhat longer than that which prevails in the West. It is reported that employees in large mills, for example, ordinarily work from 8 to 11 hours a day and obtain from 2 to 4 rest days per month in addition to a number of holidays during the year. Workers in the smaller factories and in household industries generally work longer hours and enjoy fewer days of rest.

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The daily wage scales and customary hours of work in Japan do not necessarily result in lower labor costs per unit of product in Japan than in countries with higher wages and shorter hours. Unit labor costs are the result not only of wage rates but of the efficiency of workers and of management, equipment, and resources with which workers are employed. All evidence points to the fact that, as a general rule, and with certain important exceptions, the productivity of Japanese workers although increasing is still below that of American workers.

The lower level of Japanese hourly wage rates than in western industrial countries is not a factor of recent introduction in the competition between Japanese and other enterprises. The availability of a large supply of inexpensive labor in Japan has long affected the competitive strength of Japanese enterprises in export markets. The competitive position of Japan in world trade has been enhanced, in recent years, only insofar as Japanese labor costs have fallen relative to the labor costs in competing industries in other countries. Owing to the fact that the industrialization of Japan has occurred principally in the last few decades, the efficiency of Japanese industry has tended to rise compared with that of the industries of countries industrialized earlier. Inasmuch as Japanese wages have not risen to the degree that the relative efficiency of Japanese industries has increased, there has been a tendency toward declining labor costs in Japan compared with those in other countries, and this tendency has perhaps been stronger than usual in the last few years, owing to the rationalization movement discussed below.

The failure of Japanese wages to rise under these circumstances probably has been partly due to the absence of strong labor organizations in Japan. A more fundamental and persistent factor, however, tending to keep wages in Japan low in spite of increases in industrial efficiency has been the rapidly increasing population of the country.

In recent years the population of Japan has been growing at the rate of almost a million a year. Since Japan has long been a country of large population relative to physical resources, the extraction of primary products from the country's already intensively utilized resources does not offer advantageous employment for an increasing number of workers. The tendency, therefore, has been to employ a larger part of the labor supply in the processing of raw materials, many of which have had to be imported in increasing amounts. Thus, the expanding population has not only strengthened the competitive position of certain Japanese industries in export markets but has made Japan more dependent on foreign sources of materials. The level of wages in Japan, therefore, has to a considerable extent, been dependent upon the terms upon which the products of the growing Japanese labor supply could be sold in foreign markets in order that foreign materials required in increasing quantities by Japanese industry might be paid for.

3. *The industrial rationalization movement.*—Since the World War there has developed in Japan a national movement designed to promote the development and application of more effective industrial and business methods. This is known as the rationalization movement. Previous experience with the introduction of American and European industrial technique made the Japanese sanguine of the

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results to be obtained from further developments in this direction. The close relation of the Japanese Government to the industries of the country made it possible for a centralized program, with the object of promoting improvement of industrial and business technique, to achieve quick and important results. A series of natural and economic calamities—the earthquake of 1923, the financial panic of 1927, and the deflation of 1930 aided in advancing this movement through forcing the weaker concerns into liquidation and through concentrating control. Hard times impressed upon the survivors and the Government the necessity for achieving more efficiency in industry.

As a result of the rationalization movement, the equipment and technical methods of whole industries have been greatly improved in a very few years, and probably more rapidly than would have been the case if the introduction of improved methods had been left wholly to individual initiative. Among the industries in which such improvements have been conspicuous are cotton spinning and weaving. Large production economies have also been realized in rayon plants, woolen mills, coal mines, large size porcelain factories, locomotive factories, and numerous other enterprises.

The improvements in industrial technique achieved under the rationalization movement have been confined for the most part to manufacturing industries which operate on a large scale. According to the latest census returns, only a trifle over one-sixth of Japan's total working population was engaged in manufacturing in 1930, and Japanese manufacturing in many lines is still carried on as a household industry or by small enterprises. A substantial part of the goods which enter into Japan's export trade are produced by such enterprises. Examples are provided in some toys, fans, parasols, matches, straw braids, pottery, and knit goods. The technical methods and equipment in industries conducted on a small scale have not been materially affected by the rationalization movement. This is also true of Japan's agriculture, which in 1930 occupied nearly one-half of the country's working population.

The rationalization program, however, was also directed to the promotion of economies in purchasing materials for, and in marketing the products of, Japanese industry. For industries operating on a small scale, as well as for those conducted as large enterprises, economies of this kind have been achieved through the activities of guilds and export associations.

The strength of Japanese competition in foreign markets in many lines of goods has been considerably increased as a result of these developments.

4. *The fall in the price of raw silk.*—The decline in the price of raw silk has created pressure on the Japanese economy—pressure which has tended to result in expansion of the country's foreign trade. The fall in the price of raw silk necessitated either a great reduction in imports or a great increase in the exports of other commodities, many of which, unlike raw silk, are produced from imported materials.

Between 1920 and 1929 raw silk, for which the United States is much the most important market, had usually accounted for over 35 percent of the value of Japan's total exports. For several years prior to 1929, however, the trend of raw-silk prices was downward under the influence of increasing production in Japan and the growing competition from artificial silk fibers. After 1929 the trend of raw-silk prices

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in export markets was sharply downward at the same time that there was some decline in Japanese exportation. For the fall in raw-silk prices in this period, the long-continued depression in the United States and the increasingly effective competition of artificial silk were principally responsible. In spite of the depreciation of the yen in foreign exchange to about 35 percent of its 1929 gold value, the average unit value in yen of Japanese raw silk exports in 1934 reached a new low. (See table 2, p. 16.) The importance of the decline in the price of raw silk to Japan's foreign-trade position is indicated by the fact that in 1934 exports of 507,000 bales brought only 287,000,000 yen compared with the 784,000,000 yen brought by 580,000 bales in 1929.

This fall in the price of raw silk contributed in important degree to the lowering of the income of the Japanese rural population, and the poverty of the rural areas facilitated the recruiting of laborers for Japanese factories—many of them producing at least partly for the export market.

5. *Japanese military operations and investments in North China.*—The expenditures of the Japanese Government and nationals in North China increased the demand for foreign exchange in Japan beyond what it would have been in the absence of such expenditures and thus tended to promote exportation and other operations that would provide such exchange. The Japanese military operations and investments directly promoted the exportation of Japanese goods to the areas in which these operations were carried on, but only in part were the expenditures so sustained; in part they were supported by exports to other areas.

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3. UNITED STATES-JAPANESE TRADE IN RECENT YEARS

Position of Japan and the United States in Each Other's Trade.

In recent years Japan has usually ranked third among foreign countries as a market for exports from the United States and second as a source of imports into this country. Only the United Kingdom and Canada have been taking our exports in greater value than Japan, and only Canada has been supplying us with imports of greater value. The percentage of our total exports going to Japan increased from 5 in 1929 to 10 in 1934. The percentage of our total imports coming from that country fell from 10 percent in 1929 to 7 percent in 1934.

In recent years the United States has been the most important source of Japan's imports and for a long time has been Japan's largest export market. Because of increased purchases by Japan of a number of United States products, principally raw cotton, petroleum, and unmanufactured and semimanufactured metals, the proportion of that country's total imports, accounted for by goods from the United States, has risen appreciably—from 29.5 percent in 1929 to 33.7 percent in 1934. On the other hand, the percentage of exports from Japan to the United States has fallen greatly in recent years, from over 40 in the predepression period to 26.4 in 1933, and to 18.4 in 1934. As indicated below, the fall in the price of raw silk was the most important, though not the sole, factor responsible for this decline.

Japan-United States Balance of Trade.

Table 10 shows our exports to, and imports from, Japan for the period 1924–35, as given in official statistics of the United States. Table 11 gives the United States-Japan trade as shown by the Japanese trade returns. It will be noticed that the variations in dollar values do not correspond closely, especially in the later years, with the variations of the corresponding yen figures. The discrepancy is due principally to variations in the dollar-yen exchange rate.[1]

[1] There are additional reasons, however, for discrepancies between the Japanese and United States trade returns covering ostensibly the same trade. Goods from third countries transshipped through Japan to the United States may be reported in the United States statistics among imports from Japan but may not be reported in the Japanese trade returns among Japan's exports to the United States. Transit trade going in the opposite direction gives rise to similar discrepancies. Again, exports from, and imports into, Korea (Chosen) and Formosa (Taiwan) are not reported in the Japanese statistics as part of the trade of Japan, but United States trade with these areas is included in the United States statistics of trade with Japan. Similarly Japanese trade with Hawaii is not reported in the Japanese statistics as part of trade with the United States, while such trade is included in United States statistics as part of the United States trade with Japan. Discrepancies also arise from certain shipments of goods being reported by the exporting country as part of its trade of 1 year, whereas in the trade of the importing country the shipments are recorded in the trade of the following year. In addition to such factors the value figures are affected by the different bases of valuation employed by the two countries. (See also footnote 2, p. 32.)

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TABLE 10.—*United States-Japan trade (United States statistics)*

[Values in millions of dollars]

Year	Exports from United States to Japan [1] [2]		Imports into United States from Japan [1] [3]		Excess of exports (+) imports (−)	Average annual dollar-yen exchange rate [4]
	Value	Percent of total United States exports	Value	Percent of total United States general imports		
						Cents
1924	250	5.4	340	9.4	−90	41.19
1925	228	4.6	384	9.1	−156	41.04
1926	261	5.4	401	9.0	−140	47.12
1927	258	5.3	402	9.6	−144	47.41
1928	288	5.6	384	9.4	−96	46.41
1929	259	4.9	432	9.8	−173	46.10
1930	165	4.3	279	9.1	−114	49.39
1931	156	6.4	206	9.9	−50	48.85
1932	135	8.4	134	10.1	+1	28.11
1933	143	8.5	128	8.8	+15	25.65
1934	210	9.8	119	7.2	+91	29.72
9 months ending September [5]—						
1933	91	8.2	92	8.9	−1	[6] 24.17
1934	137	8.8	90	7.2	+47	[6] 29.99
1935	133	8.5	108	7.2	+25	[6] 28.71

[1] Foreign Commerce and Navigation of the United States.

[2] The figures shown are for total exports including reexports, as well as exports of domestic merchandise. The value of reexports reported in the different years shown has varied from about 380 to 876 thousand dollars. The average for all the years was 584 thousand dollars.

[3] The figures shown are for general imports. General imports include articles entered for immediate consumption and those entered for warehouse. The latter may subsequently be entered for consumption or reexported without change of condition. Figures for imports for consumption by country for years prior to 1934 are not available. They would not, however, show the general situation materially different from that shown by the general import statistics. Imports for consumption from Japan in 1934 were valued at about 118 million dollars.

[4] Federal Reserve Bulletin.

[5] Monthly Summary of Foreign Commerce of the United States.

[6] Nine months' average.

TABLE 11.—*Foreign trade of Japan: United States and all other countries shown separately (Japanese statistics)*

[Values in millions of yen]

Year	Trade with United States					Trade with all other countries		
	Imports		Exports		Excess of exports (+) imports (−)	Imports	Exports	Excess of exports (+) imports (−)
	Value	Percent of total imports into Japan	Value	Percent of total exports from Japan				
1924	671	27.4	745	41.2	+74	1,782	1,062	−720
1925	665	25.8	1,006	43.6	+341	1,908	1,300	−608
1926	680	28.6	861	42.1	+181	1,697	1,184	−513
1927	674	30.9	834	41.9	+160	1,505	1,158	−347
1928	626	28.5	826	41.9	+200	1,570	1,146	−424
1929	654	29.5	914	42.5	+260	1,562	1,235	−327
1930	443	28.7	506	34.4	+63	1,103	964	−139
1931	342	27.7	425	37.1	+83	894	722	−172
1932	510	35.6	445	31.6	−65	921	965	+44
1933	621	32.4	492	26.4	−129	1,296	1,369	+73
1934	769	33.7	399	18.4	−370	1,514	1,773	+259
9 months ending September:								
1933	439	30.8	383	28.3	−56	985	971	−14
1934	530	31.8	293	18.7	−237	1,137	1,271	+134
1935	607	33.0	374	20.5	−233	1,231	1,448	+217

Source: Annual Return of the Foreign Trade of Japan. 9 months' figures for 1933, 1934, and 1935 from Monthly Return of the Foreign Trade of Japan (September 1935).

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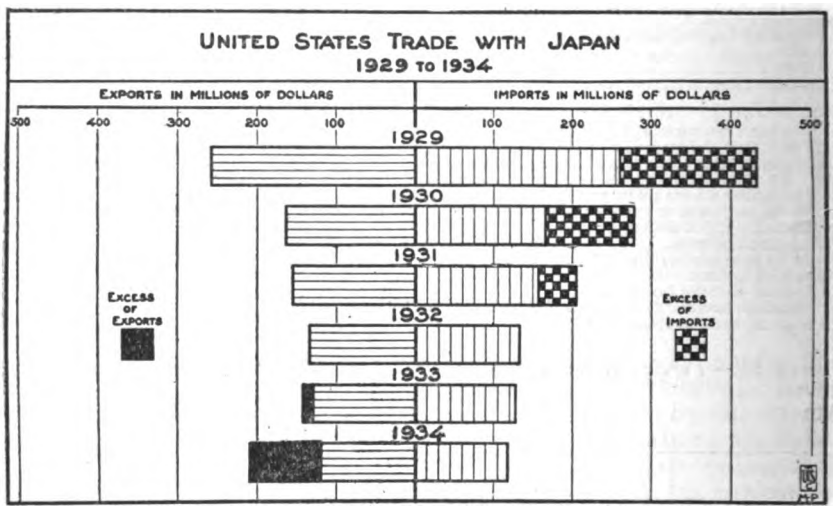
For many years prior to 1932, United States imports from Japan exceeded in value United States exports to Japan. The merchandise trade between the two countries, therefore, resulted in debit balances for this country and credit balances for Japan. In 1929 and the years immediately preceding, the credit balances of Japan on account of trade with the United States were substantial—according to United States statistics our imports from Japan averaged about 45 percent greater than our exports to that country; on the basis of Japanese statistics Japan's exports to the United States averaged 30 percent greater than her imports from this country.[2]

Since 1929, however, the balance of trade between the United States and Japan has been reversed. In 1930 and 1931 the United States debit balance on account of trade with Japan fell sharply, and in 1932 the value of our exports to Japan exceeded the value of our imports from that country. In 1933 and 1934 our credit balance in the trade with Japan increased and in 1934 the value of our imports



from Japan was only about 57 percent of the value of our exports to that country.

The change in Japan's balance on merchandise account in its trade with the United States has been accompanied by an opposite change in the status of Japan's balance of merchandise trade with all other countries taken as a group. This change is also shown in table 11. For many years prior to 1932 Japan normally had substantial debit balances in its total trade with countries other than the United States; since 1932 the reverse has been true. Formerly, Japan employed her credit balances on merchandise account in trade with the United

[2] If the yen balances shown by the Japanese trade returns are converted into dollars at the average rate of exchange for each year, the Japanese figures will usually show smaller credit balances for Japan in years preceding 1932, and larger debit balances for Japan in the later years than do the United States statistics. The principal reason for this is that the values of United States' exports generally recorded in this country's trade statistics are the values as of the United States ports of shipment. In the Japanese trade returns, imports are recorded at their values landed in Japan. A discrepancy does not appear for a similar reason in the case of the values of Japanese exports to the United States as opposed to the values of United States imports from Japan. In the trade returns of both countries, such goods are generally entered at their values in Japan. There are, however, other reasons for discrepancies in the balances shown by the official statistics of the two countries. (See footnote 1, p. 30.)

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States to offset a part of the debit balances resulting from her trade with other countries. In the last few years the appearance of debit balances in Japan's commodity trade with the United States has been, in part, offset by the development of credit balances for Japan in her trade with the rest of the world.

Present conditions of world trade are so disturbed that it is impossible to judge with any confidence how long the changed trade relations represented by Japan's balances of the last few years are likely to continue. The fact that the trade returns for the first 9 months of 1935 show a smaller debit balance for Japan in its trade with the United States than appeared in the corresponding months of 1934 may indicate that the trend of the past few years toward larger debit balances for Japan in its trade with the United States has been arrested. The price of raw silk, although it has recently been moving upward, is still far below the 1929 level, and as long as this situation continues, it will be a restraining influence against the reversion of the trade balance between the United States and Japan to its predepression status.

The chief factors contributing to the reversal of Japan's trade balances with the United States and with all other countries combined, were (*a*) the fall in the price of raw silk, for which the United States has been much the most important market; (*b*) the expansion of Japan's exports of commodities for which markets have been found chiefly in countries other than the United States; and (*c*) the fact that much of the expansion of Japan's exports in recent years has been in products made from materials of which the United States is an important supplier. The recent expansion of Japan's export trade, therefore, has tended to promote increases in that country's imports of a number of commodities from the United States. This is true, notwithstanding the difficulty of expanding exports to this country, and in spite of substantial increases in the yen prices of United States goods caused by the fall in the foreign exchange value of the yen. Among Japan's imports from the United States, raw cotton is much the most important commodity, and in it there was, after 1932, a considerable rise in the dollar price, as well as in the yen price.

The change in the United States-Japan trade balance since the beginning of the depression is the result principally of the decline in the value of goods coming to the United States from Japan. In terms of dollars, the Japanese goods imported into the United States fell every year from 1929 to 1934. The movement of the yen value of this trade after 1931 did not parallel the changes in the dollar figures owing to the fall in the foreign-exchange value of the yen beginning in December 1931. The yen figures for Japan's exports to the United States, which had decreased in 1930 and 1931, rose again in 1932 and 1933. In 1934, however, even the yen value of Japan's exports to this country was lower than in any previous year since 1916.

On the other hand, the dollar figures for our exports to Japan did not decline from 1929 to 1932 as much as did the dollar value of our imports from that country. Moreover, after 1932, instead of continuing to decline in dollar value as did our imports from Japan, our exports to that country substantially increased; in 1934, their dollar value was 56 percent greater than in 1932 and was within 20 percent of the 1929 level. The same general trends are shown in this case by the yen figures of the trade except that in 1932 as compared with 1931

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instead of decreasing as did the dollar values, the yen values of imports into Japan from the United States increased. This rise in yen figures in 1932 resulted from the fall in the foreign-exchange value of the yen in terms of dollars. The further increase in the total yen value of exports to the United States in 1933 and 1934 was due to a growth in the volume of trade and the rise in the price of raw cotton and probably in the average of prices of other articles entering the trade.

United States Imports from Japan of Raw Silk and of All Other Commodities.

Before 1929 raw silk had accounted for over 80 percent of our total imports from Japan; in 1934 it accounted for less than 60 percent.[3] The severe decline in the price of raw silk after 1929, therefore, dwarfed all other factors affecting the value of our total imports from Japan.

Table 12, giving our imports of raw silk, and our aggregate imports of all other commodities, from Japan, is compiled from United States statistics, and table 13, covering in general the same trade, is compiled from Japanese trade returns. The effect of the decline in the aggregate and unit value of our imports of raw silk on the Japan-United States trade balance is evident.

TABLE 12.—*General imports into the United States from Japan: Raw silk and all other commodities shown separately (United States statistics)*

[Values in millions of dollars]

Year	Imports into United States from Japan [1]					Average annual dollar-yen exchange rate [2]
	Total value of all commodities	Raw silk			Value of all other commodities	
		Quantity	Value	Percent of total value		
		Million pounds				*Cents*
1924	340	44	286	84.1	54	41.19
1925	384	50	318	82.8	66	41.04
1926	401	54	329	82.0	72	47.12
1927	402	62	334	83.1	68	47.41
1928	384	64	318	82.8	66	46.41
1929	432	70	356	82.4	76	46.10
1930	279	60	221	79.2	58	49.39
1931	206	70	163	79.1	43	48.85
1932	134	69	106	79.1	28	28.11
1933	128	60	92	71.9	36	25.65
1934	119	[3] 55	[3] 70	58.8	49	29.72
9 months ending September—						
1933	[4] 92	[5] 46	[5] 67	72.8	25	[6] 24.17
1934	[4] 90	[5] 41	[5] 54	60.0	36	[6] 29.99
1935	[4] 108	[5] 47	[5] 62	57.4	46	[6] 28.71

[1] Foreign Commerce and Navigation of the United States.
[2] Federal Reserve Bulletin.
[3] Imports for consumption.
[4] Monthly Summary of Foreign Commerce of the United States.
[5] Imports for consumption. Compiled by the U. S. Tariff Commission from monthly statistics of imports for consumption (unpublished data in code) supplied by the U. S. Department of Commerce.
[6] 9 months' average.

[3] Additional facts concerning the United States-Japanese silk trade might be noted here. The United States has taken well over 90 percent of Japan's total exports of raw silk, and from 80 percent upward of United States imports of raw silk have come from Japan. (See appendix tables 7 and 8, pp. 94 and 96.)

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TABLE 13.—*Exports from Japan to the United States: Raw silk and all other commodities shown separately (Japanese statistics)*

[Values in millions of yen]

Year	Exports from Japan to the United States				
	Total value of all commodities	Raw silk			Value of all other commodities
		Quantity	Value	Percent of total value	
		Million kin			
1924	745	34	622	83.5	123
1925	1,006	42	849	84.4	157
1926	861	43	709	82.3	152
1927	834	49	699	83.8	135
1928	826	51	688	83.3	138
1929	914	56	758	82.9	156
1930	506	45	400	79.1	106
1931	425	54	344	80.9	81
1932	445	51	360	80.9	85
1933	492	44	356	72.3	136
1934	399	43	244	61.4	155
9 months ending September—					
1933	383	34	284	74.2	99
1934	293	32	179	61.1	114
1935	374	35	226	60.4	148

Source: Annual Return of the Foreign Trade of Japan; Monthly Return of the Foreign Trade of Japan (September 1935).

The value of our imports from Japan other than raw silk declined in each year from 1929 to 1932 but increased substantially in 1933 and 1934. The yen figures for corresponding Japanese exports to this country show increases in each year after 1931, a small increase in 1932, and large increases in the next 2 years. In comparing this trade in all later years with 1931, the yen figures probably give the better measure of quantitative changes. Although average yen prices of Japanese exports to the United States other than raw silk have risen considerably since Japan abandoned the gold standard, the price increases were slow in occurring. In 1932 prices in Japan were only about 7 percent higher than in 1931. Even at the present time (1935) it is probable that the average yen prices of Japanese exports other than raw silk have risen less as compared with 1931 levels than the dollar prices of these goods have declined.

The yen value of Japan's exports other than raw silk in 1934 was approximately the same as in 1929; in 1935 it will probably rise above the 1929 level. Inasmuch as prices in Japan were lower in 1934 and 1935 than in 1929, it is probable that in quantity Japan's exports to the United States, exclusive of raw silk, have increased considerably beyond the level of 1929.

United States Exports to Japan of Raw Cotton and all Other Commodities.

Raw cotton has long been the most important item in our export trade with Japan, and the rise in cotton prices after 1932 was a factor of considerable importance in the recent increases in the value of our total exports to Japan. This is shown in tables 14 and 15. Table 14, giving the figures for exports of raw cotton and of all other commodities from the United States to Japan, is compiled from United States statistics. Table 16 shows the corresponding imports into Japan as given by Japanese trade returns.

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TABLE 14.—*Exports from the United States to Japan: Cotton and all other commodities shown separately (United States statistics)*

[Values in millions of dollars]

Year	Exports from the United States to Japan [1]					Average annual dollar-yen exchange rate [2]
	Total value of all commodities	Cotton			Value of all other commodities	
		Quantity	Value	Percent of total value		
		Million pounds				*Cents*
1924	250	344	95	38.0	155	41.19
1925	228	509	121	53.1	107	41.04
1926	261	640	108	41.4	153	47.12
1927	258	735	123	47.7	135	47.41
1928	288	642	129	44.8	159	46.41
1929	259	567	109	42.1	150	46.10
1930	165	470	66	40.0	99	49.39
1931	156	914	80	51.3	76	48.85
1932	135	1,178	86	63.7	49	28.11
1933	143	950	87	60.8	56	25.65
1934	210	906	112	53.3	98	29.72
9 months ending September [3]—						
1933	91	597	51	56.0	40	[4] 24.17
1934	137	552	66	48.2	71	[4] 29.99
1935	133	419	53	39.8	80	[4] 28.71

[1] Foreign Commerce and Navigation of the United States.
[2] Federal Reserve Bulletin.
[3] Monthly Summary of Foreign Commerce of the United States.
[4] 9 months' average.

TABLE 15.—*Imports into Japan from the United States: Cotton and all other commodities shown separately (Japanese statistics)*

[Values in millions of yen]

Year	Imports into Japan from the United States				
	Total value of all commodities	Cotton			All other commodities
		Quantity	Value	Percent of total value	
		Million kin			
1924	671	237	205	30.6	466
1925	665	380	360	54.1	305
1926	680	452	317	46.6	363
1927	674	636	344	51.0	330
1928	626	387	246	39.3	380
1929	654	449	276	42.2	378
1930	443	388	177	40.0	266
1931	342	532	154	45.0	188
1932	510	910	321	62.9	189
1933	621	743	382	61.5	239
1934	769	649	401	52.1	368
9 months ending September—					
1933	439	507	259	59.0	180
1934	530	467	278	52.5	252
1935	607	409	268	44.2	339

Source: Annual Return of the Foreign Trade of Japan; Monthly Return of the Foreign Trade of Japan (September 1935).

Japan, however, does not get its supplies of raw cotton entirely from the United States. Other important sources of imports of this commodity are British India, China, and Egypt. With the rise in the price of American cotton relative to the price of Indian cotton,

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larger percentages of Japan's total imports of cotton have been supplied by British India. The quantity of American cotton purchased by Japan has in fact decreased each year since 1932, in spite of the upward trend of the quantity of Japan's total imports of raw cotton. Nevertheless, the quantities of American cotton purchased by Japan in all recent years have been much above the predepression average, and since 1931 Japan has become the principal foreign market for this country's cotton crop chiefly because of the decline in the purchases of other countries. In 1934 Japan took 30 percent of the United States exports of raw cotton. Japan's purchases were larger in that year than the combined purchases of the United Kingdom and Germany, the next largest buyers. (For fuller information on the exports of cotton from the United States and the imports of cotton into Japan, see appendix tables 9 and 10, pp. 98 and 100.)

In spite of the decreases in the quantity of Japan's imports of cotton from the United States in 1933 and 1934, the value of American cotton going to Japan increased considerably each year from 1931 to 1934, and these increases accounted for about 60 percent of the greater value of United States exports to Japan in 1934 than in 1931.

United States-Japanese Trade in Raw Cotton and Raw Silk Compared.

The terms upon which the two most important articles of trade between Japan and the United States have been exchanged are brought out more clearly in the following tabulation:

	Imports of raw silk into the United States from Japan			Exports of raw cotton from the United States to Japan		
	Quantity	Value	Unit value	Quantity	Value	Unit value
	Million pounds	*Million dollars*		*Million pounds*	*Million dollars*	
1923–28 (average)	55	317	$5.76	574	115	$0.20
1929	70	356	5.09	567	109	.19
1930	60	221	3.68	470	66	.14
1931	70	163	2.33	914	80	.09
1932	69	106	1.54	1,178	86	.07
1933	60	92	1.53	950	87	.09
1934	55	70	1.27	906	112	.12
January–September—						
1933	46	67	1.46	597	51	.09
1934	41	54	1.32	552	65	.12
1935	47	62	1.32	419	52	.12

Until 1932 the downward movement in the unit value of imports of raw silk into the United States from Japan was roughly paralleled by the decline in the unit value of our exports of cotton. Thereafter, the unit value of imports of Japanese raw silk continued to decline, while the unit value of our exports of cotton moved sharply upward. The weight of American cotton necessary to purchase a pound of silk dropped from an average of approximately 26 pounds in 1929 to 10 pounds in 1934. In the predepression period, United States purchases of raw silk from Japan were usually valued at about three times as much as Japan's purchases of raw cotton from the United States. In 1933 the value of Japan's purchases of American raw cotton almost equaled, and in 1934 surpassed, our purchases of Japan's raw silk. In part, this change was due to the larger quantities of

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American raw cotton purchased by Japan in the later years than in the predepression period, but the difference in the movements of the prices of the two commodities was a more important influence.

Trade of the United States and Japan Exclusive of Raw Silk and Raw Cotton.

The total value of United States annual exports to Japan, exclusive of raw cotton, has regularly exceeded the value of United States imports from Japan, exclusive of raw silk, as shown in the following tabulation:

	Total value of imports into the United States from Japan, excluding raw silk	Total value of exports (including reexports) from the United States to Japan, excluding raw cotton	Average annual dollar-yen exchange rate
	Millions of dollars	*Millions of dollars*	*Cents*
1924–28 (average)	65	142	44.63
1929	76	150	46.10
1930	58	99	49.39
1931	43	76	48.85
1932	28	49	28.11
1933	36	56	25.65
1934	49	98	29.72
January–September—			
1933	25	40	[1] 24.17
1934	36	72	[1] 29.99
1935	48	80	[1] 28.71

[1] 9-months' average.

The aggregate dollar value of United States annual exports to Japan, other than raw cotton, declined steadily from 1929 to 1932 and after the latter year rose markedly. The value of United States annual imports from Japan, other than raw silk, followed the same general course. However, as already pointed out, a large part, possibly even the whole, of the decrease in the dollar value of such imports between 1931 and 1932 may have been due to the fall in the dollar prices of the goods, incidental to the depreciation of the yen. Since 1932 United States imports from Japan, exclusive of raw silk, have not increased nearly as much as Japan's purchases of United States goods, exclusive of raw cotton. This is apparently true of quantities as well as of the values shown in the table.

Some phases of the trade between the United States and Japan discussed in this and preceding sections are depicted in the accompanying charts.

Duty-free and Dutiable Imports into the United States from Japan.

The bulk of United States imports from Japan is accounted for by commodities which enter this country free of duty. This is due, of course, principally to the inclusion of raw silk in the duty-free category. However, a number of the other important items of importation into this country from Japan are also on the free list. The Japanese goods which enter the United States free of duty consist, in the main, either of materials used by American industries or of commodities not produced in the United States; in the case of certain items both of these statements apply. Some of the duty-free imports from Japan are competitive with similar goods produced in the United States, but the bulk of imports of duty-free Japanese goods is

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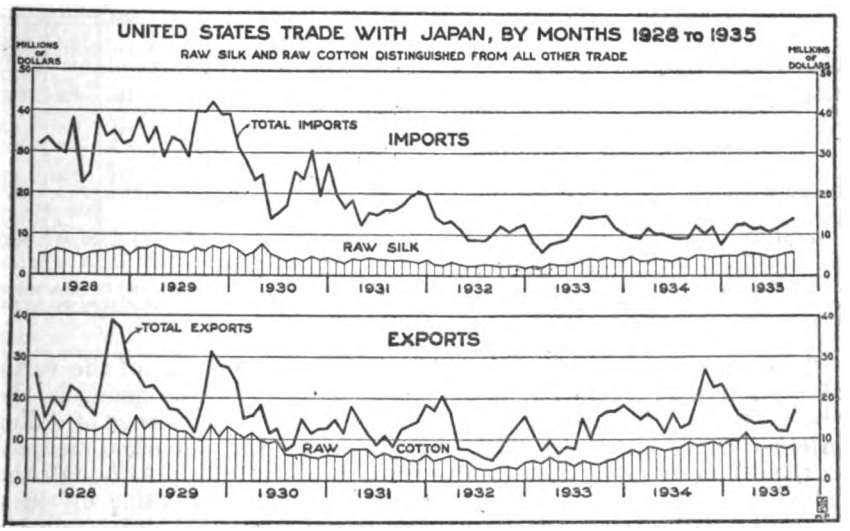
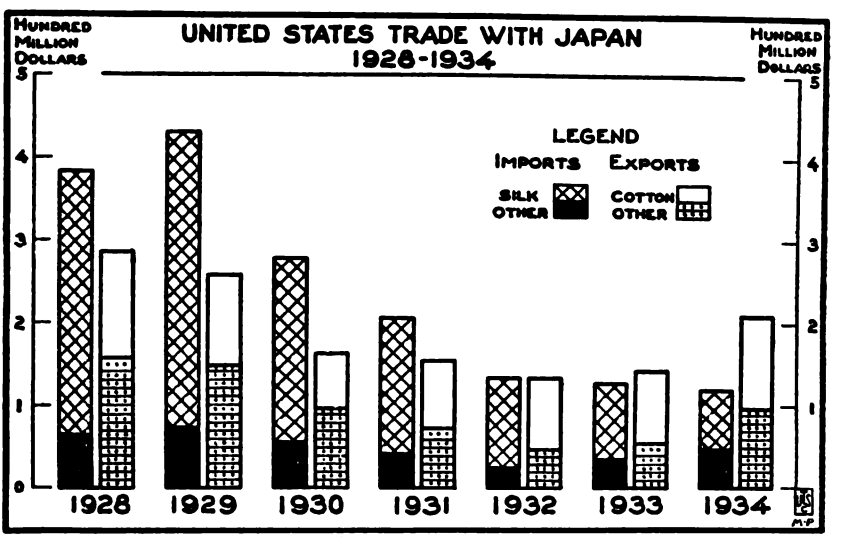
complementary to rather than competitive with, domestic production. Some dutiable imports are not highly competitive with domestic products, but nearly all the Japanese imports that have attracted



attention from competing domestic interests are subject to import duties. Moreover, the bulk of the dutiable imports from Japan



consists of articles produced in the United States, although the domestic production is often of different grades from the Japanese imports.

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The values of total, duty-free, and dutiable imports from Japan in recent years, were as follows:

	1928	1929	1930	1931	1932	1933	1934	Jan.-Sept. 1934	Jan.-Sept. 1935
Total (millions)[1]	$384	$432	$279	$206	$134	$128	$118	$89	$107
Duty-free (millions)[1]	$339	$378	$239	$174	$115	$102	$84	$65	$78
Percent of total	88.3	87.5	85.7	84.5	85.8	79.7	71.2	73.0	70.1
Dutiable (millions)[1]	$45	$54	$40	$32	$19	$26	$34	$24	$32
Percent of total	11.7	12.5	14.3	15.5	14.2	20.3	28.8	27.0	29.9
Average annual dollar-yen exchange rate (cents)	46.41	46.10	49.39	48.85	28.11	25.65	29.72	29.99	28.71

[1] The figures given for all years except 1934 and 1935 are for "general imports", for 1934 and 1935 the figures are for imports for consumption. If both sets of figures were available for the different years they would not give materially different results.

The principal reason for the decline in the percentage of the value of total imports from Japan represented by duty-free goods is the greater fall in the dollar price of raw silk than in the average of dollar prices of dutiable goods. There has, however, been a marked increase in the dollar value of the dutiable imports since 1932. Although the fall in the yen exchange rate resulted in the dollar value of these imports in 1934 being only slightly greater than in 1931, it is probable that, in terms of quantity, the imports of such articles in 1934 were materially larger than in the earlier year.

Principal Duty-free Imports From Japan.

Table 16 shows the quantity and value of the principal duty-free goods imported into the United States from Japan in 1929, 1931, 1933, and 1934. This list of 23 classifications of imports for consumption [4] includes all duty-free classifications of imports from Japan of which the value was more than $200,000 in either 1929 or 1934. The commodities shown in the table accounted for over 96 percent of all duty-free imports from Japan in 1934 and for at least as large percentages of such imports in the other years shown in the table.

TABLE 16.—*Imports for consumption in the United States of duty-free items from Japan valued at more than $200,000 in 1929 or in 1934*

[Values in thousands of dollars]

	1929	1931	1933	1934
Tuna fish, fresh or frozen:				
Quantity (thousands of pounds)	6,243	6,812	4,497	5,733
Value	$686	$530	$179	$396
Coney and rabbit furs, undressed:				
Quantity (thousands of pounds)	487	276	478	457
Value	$731	$359	$319	$401
Fox furs (other than silver or black), undressed:				
Quantity (thousands)	41	8	18	15
Value	$330	$68	$96	$130
Marten furs, undressed:				
Quantity (thousands)	26	13	3	2
Value	$335	$64	$11	$11

[4] Imports entered for consumption are shown by country of origin in table 1 of Foreign Commerce and Navigation of the United States for 1934. The figures of imports for consumption have not been shown by country in published reports in other years. Statistics of imports for consumption from Japan, shown in tables 16 and 17 and part 2 of this report, were compiled by the staff of the Tariff Commission from unpublished monthly reports (in code) supplied by the Bureau of Foreign and Domestic Commerce.

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TABLE 16.—*Imports for consumption in the United States of duty-free items from Japan valued at more than $200,000 in 1929 or in 1934*—Continued

[Values in thousands of dollars]

	1929	1931	1933	1934
Mink furs, undressed:				
Quantity (thousands)	752	697	849	882
Value	$2,104	$663	$614	$955
Squirrel furs, undressed:				
Quantity (thousands)	280	75	124	161
Value	$250	$45	$82	$121
Fur skins, n. s. p. f., undressed:				
Quantity (thousands)	27	22	24	1
Value	$312	$16	$17	$9
Fish scrap and fish meal:				
Quantity (thousands of tons)	[1]	27	24	34
Value	[1]	$940	$611	$931
Tea, except Paraguay tea, plants, and waste:				
Quantity (thousands of pounds)	24,539	21,417	24,881	22,569
Value	$5,152	$3,143	$1,898	$2,286
Pyrethrum or insect flowers:				
Quantity (thousands of pounds)	8,815	3,872	9,066	10,094
Value	$2,013	$453	$1,373	$1,986
Rapeseed (colza) oil, denatured:[2]				
Quantity (thousands of gallons)	----------	1,254	1,263	1,974
Value	----------	$498	$354	$616
Vegetable wax:				
Quantity (thousands of pounds)	3,061	2,137	2,754	1,904
Value	$458	$171	$130	$106
Perilla oil:				
Quantity (thousands of pounds)	2,193	6,110	16,109	16,667
Value	$253	$333	$851	$1,118
Camphor oil:				
Quantity (thousands of pounds)	2,171	1,628	1,349	1,113
Value	$220	$184	$84	$124
Cotton waste:				
Quantity (thousands of pounds)	5,070	3,359	3,129	1,449
Value	$277	$141	$69	$53
Jute waste bagging and waste sugar sack cloth:				
Quantity (thousands of pounds)	303	5,142	8,327	13,024
Value	$5	$68	$114	$211
Raw silk:				
Quantity (thousands of pounds)	70,696	69,526	60,213	54,989
Value	$355,927	$163,070	$91,659	$69,847
Silk waste, not specially provided for:				
Quantity (thousands of pounds)	3,535	2,381	1,526	1,532
Value	$1,290	$246	$78	$173
Rags for paper stock:				
Quantity (thousands of pounds)	71,515	32,697	38,958	36,151
Value	$1,426	$507	$153	$199
Platinum ingots, bars, sheets, or plates, not less than ⅛-inch thick:				
Quantity (thousands of ounces, troy)	4	----------	9	9
Value	$249	----------	$275	$297
Ammonium sulphate:				
Quantity (thousands of tons)	----------	10	45	32
Value	----------	$352	$842	$625
Nitrogenous fertilizer material other than ammonium, calcium, sodium guano, dried blood, and urea (including hoof meal, castor-bean pomace):				
Quantity (thousands of tons)	----------	1	3	16
Value	----------	$23	$67	$433
Substances used chiefly for fertilizer, not elsewhere specified:				
Quantity (thousands of tons)	[3]	3	9	7
Value	$5	$52	$200	$201
Total of above items	[4] $372,023	$171,926	$100,076	$81,229
Total for data available for all 4 years	372,023	170,986	99,465	80,298

[1] No comparable statistical classification.
[2] See also dutiable list (table 17) for rapeseed oil, not denatured.
[3] Less than 1000 tons.
[4] Total represents only the value of items for which statistics are available.

The remainder of the value of duty-free imports from Japan is accounted for mainly by crude moss and seaweed; certain unmanufactured woods, principally bamboo; unmanufactured cork; creosote, or dead oil; works of art over a hundred years old; United States products returned; and imports entered under special provisions, such

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as household effects of persons entering the United States. Under the Tariff Act of 1922, linseed oil cake and meal, and soybean oil cake and meal, now dutiable, were on the free list. The imports from Japan of these commodities in 1929 (shown in table 17) accounted for part of the value of duty-free imports from Japan in that year.

Principal Dutiable Imports From Japan.

Dutiable imports from Japan fall in a great number of tariff and statistical classifications and few of the items taken individually account for any considerable proportion of the total value of dutiable imports from Japan. Table 17 shows the principal dutiable goods imported from Japan. This list, consisting of 53 classifications of imports for consumption, includes all dutiable imports from Japan of which the value in either 1929 or 1934 was more than $200,000.

TABLE 17.—*Imports for consumption in the United States of dutiable items from Japan valued at more than $200,000 in 1929 or in 1934*

[Values in thousands of dollars]

	1929	1931	1933	1934
Tuna fish, in oil, etc.:				
Quantity (1,000 pounds)	[1] 63	649	14,219	7,568
Value	[1] $12	$127	$1,950	$1,204
Crab meat, sauce, and paste:				
Quantity (1,000 pounds)	10,104	9,361	6,943	5,232
Value	$4,538	$3,748	$2,057	$1,747
Herring oil:				
Quantity (1,000 gallons)	[2] 2,491	2,693	698	----------
Value	[2] $996	$930	$42	----------
Bristles, sorted, bunched, or prepared:				
Quantity (1,000 pounds)	126	278	331	285
Value	$395	$449	$741	$917
Soybean oil cake and meal:				
Quantity (1,000 pounds)	[3] 28,669	5,368	7,154	6,246
Value	[3] $576	$59	$60	$60
Linseed oil cake and meal:				
Quantity (1,000 pounds)	28,002	13,460	24,300	15,484
Value	$639	$143	$181	$134
Dried beans:				
Quantity (1,000 pounds)	24,797	26,592	1,887	1,971
Value	$1,370	$661	$36	$34
Sauces, not specially provided for:				
Quantity (1,000 pounds)	8,592	7,600	8,528	8,164
Value	$473	$374	$229	$227
Still wines—rice wine (sake):				
Quantity (1,000 gallons)	----------	----------	5	247
Value	----------	----------	$4	$205
Rubber-soled footwear, fabric uppers:				
Quantity (1,000 pairs)	[4]	[4]	2,321	1,306
Value	[4]	[4]	$331	$300
Rubber toys, including toy balloons: Value	$70	$65	$340	$263
Camphor, natural, crude:				
Quantity (1,000 pounds)	4,204	1,964	1,989	2,663
Value	$1,579	$700	$411	$646
Camphor, natural, refined:				
Quantity (1,000 pounds)	1,382	1,191	1,599	1,425
Value	$764	$573	$479	$570
Rapseed (colza) oil, not denatured: [5]				
Quantity (1,000 gallons)	2,507	242	119	241
Value	$1,588	$117	$47	$84
Lily bulbs:				
Quantity (thousands)	[6] 17,478	15,008	15,692	16,886
Value	[6] $1,046	$589	$378	$407
Agar-agar:				
Quantity (1,000 pounds)	495	466	628	464
Value	$400	$303	$165	$156

[1] Based on Japanese statistics of exports to the United States.
[2] Classification for 1929 provides for "Herring, menhaden, and sod oil", but it is believed that the imports from Japan (statistics shown) during that year consisted almost entirely of herring oil.
[3] Classification for 1929 provides for "Soy and other bean oil cake and meal", but it is believed that all the imports from Japan (statistics shown) during that year consisted of soybean oil cake and meal.
[4] No comparable statistical classification.
[5] See also free list (table 16) for rapeseed oil, denatured.
[6] Classification for 1929 provides for "Lily of the valley pips, tulip, narcissus, and lily bulbs", but it is believed that the imports from Japan (statistics shown) during that year consisted almost entirely of lily bulbs.

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TABLE 17.—*Imports for consumption in the United States of dutiable items from Japan valued at more than $200,000 in 1929 or in 1934*—Continued

[Values in thousands of dollars]

	1929	1931	1933	1934
Countable cotton cloth:				
Quantity (1,000 pounds)	1,217	770	1,116	7,287
Value	$189	$106	$78	$363
Cotton hit-and-miss rag rugs:				
Quantity (1,000 square yards)	2,020	3,583	3,989	3,750
Value	$1,140	$433	$259	$273
Cotton chenille rugs:				
Quantity (1,000 square yards)	(1)	317	1,072	1,182
Value	(1)	$119	$254	$379
Cotton carpets, carpetings, mats and rugs, except hit-and-miss rag rugs and chenille rugs:				
Quantity (1,000 square yards)	(1)	1,850	3,995	5,646
Value	(1)	$365	$536	$694
Cotton rags, including wiping rags, except for papermaking:				
Quantity (1,000 pounds)	(1)	15,183	15,399	17,161
Value	(1)	$669	$459	$712
Wool wearing apparel, not specially provided for, not knit or crocheted, valued not over $4 per pound:				
Quantity (1,000 pounds)	150	26	32	28
Value	$386	$47	$33	$37
Silk woven fabrics (except pile) over 30 inches wide, not Jacquard-figured, all silk, in the gray:				
Quantity (1,000 pounds)	1,223	1,106	706	1,024
Value	$2,069	$965	$632	$944
Silk woven fabrics (except pile) over 30 inches wide, not Jacquard-figured, all silk, bleached, printed, or piece-dyed:				
Quantity (1,000 pounds)	(1)	435	200	307
Value	(1)	$903	$312	$570
Silk wearing apparel, not knit or crocheted, other than men's shirts, not embroidered or of lace: Value	$845	$394	$375	$605
Silk handkerchiefs and woven mufflers, not hemmed, and hemmed or hemstitched, other than embroidered:				
Quantity (1,000 dozens)	388	302	311	363
Value	$458	$227	$111	$163
Rayon wearing apparel, embroidered: Value	(1)	(1)	$124	$308
Braids, plaits, etc., of hemp, containing substantial part but not chief value of rayon:				
Quantity (1,000 yards)	(1)	(1)	194,209	505,240
Value	(1)	(1)	$301	$833
Braids, plaits, etc., of straw, not bleached, dyed, colored, or stained:				
Quantity (1,000 yards)	111,341	74,079	91,447	87,078
Value	$469	$189	$181	$212
Braids, plaits, etc., of manila hemp, not bleached, dyed, colored, or stained:				
Quantity (1,000 yards)	124,083	40,616	26,654	38,271
Value	$347	$175	$40	$94
Paper imitation panama hats, bleached, dyed, colored, or stained:				
Quantity (thousands)	(1)	(1)	7,068	5,746
Value	(1)	(1)	$667	$802
Manufactures of wood or bark, not elsewhere specified: Value	$334	$265	$267	$483
Manufactures of papier mâché, not specially provided for: Value	$16	$22	$179	$208
Manufactures of paper, not specially provided for: Value	$288	$147	$102	$275
China and porcelain wares—Tableware, kitchenware, etc., decorated, etc.:				
Quantity (1,000 dozens)	5,258	3,358	4,513	4,844
Value	$3,457	$1,418	$1,216	$2,004
China and porcelain ware, except chemical porcelain and stoneware, electrical and sanitary, decorated:				
Quantity (1,000 dozens)	497	1,344	1,823	3,604
Value	$261	$321	$268	$587
Earthenware, crockery, and stoneware—table, etc., ware, domestic or household ware, decorated:				
Quantity (1,000 dozens)	1,509	1,022	2,007	2,667
Value	$899	$526	$619	$1,043
Earthenware, crockery, and stoneware (other than table, toilet, etc., and sanitary ware) including filter tubes, decorated:				
Quantity (1,000 dozens)	656	803	584	769
Value	$476	$449	$210	$354
Precious and semiprecious stones (other than diamonds, pearls, and emeralds), cut but not set: Value	$307	$404	$63	$18
Other metal manufactures, not plated with platinum, gold, or silver, not specially provided for: Value	$194	$92	$156	$282
Silver-plated table, kitchen, etc., utensils and hollow or flatware: Value	$9	$26	$202	$402

(1) No comparable statistical classification.

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TABLE 17.—*Imports for consumption in the United States of dutiable items from Japan valued at more than $200,000 in 1929 or in 1934*—Continued

[Values in thousands of dollars]

	1929	1931	1933	1934
Incandescent electric lamps, carbon filament, miniature:				
Quantity (thousands)	30,577	136	85	24
Value	$861	$2	$1	(2)
Incandescent electric lamps, metal filament, miniature:				
Quantity (thousands)	3,240	47,518	97,274	67,220
Value	$81	$660	$465	$352
Incandescent electric lamps, metal filament, other than miniature:				
Quantity (thousands)	868	20,808	19,235	25,501
Value	$38	$677	$296	$479
Menthol:				
Quantity (1,000 pounds)	237	260	264	400
Value	$1,005	$697	$546	$797
Chemical elements, compounds, mixtures, and salts, not specially provided for, not containing alcohol:				
Quantity (1,000 pounds)	4	52	154	(2)
Value	$2	$94	$93	$239
Toys and parts, not specially provided for, of china, porcelain, parian, bisque, earthenware, and stoneware: Value	(1)	$156	$140	$228
Toys and parts, not specially provided for, except cellulose compounds, and china, porcelain, etc.: Value	(1)	$259	$400	$818
Toothbrushes having handles or backs of cellulose compounds:				
Quantity (thousands)	25,664	8,785	11,610	10,449
Value	$835	$247	$182	$254
Toothbrushes having handles or backs of material other than of cellulose compounds:				
Quantity (thousands)	15,708	3,974	4,497	4,733
Value	$664	$114	$60	$92
Combs of cellulose compounds, valued at $4.50 or less per gross:				
Quantity (thousands)	1,864	2,767	13,901	16,929
Value	$71	$65	$206	$265
Matches having a stained, dyed, or colored stem:				
Quantity (1,000 gross boxes)	(1)	8	2,599	1,387
Value	(1)	$1	$396	$222
Smokers' articles, not specially provided for: Value	$104	$164	$192	$241
Total value of above items	[3] $30,251	[3] $20,236	$18,072	$23,586
Total value of above items for which data are available in all 4 years shown	$30,251	$17,764	$14,152	$17,720

[1] No comparable statistical classification.
[2] Less than 500.
[3] Unit of quantity omitted, effective Jan. 1, 1934.
Total represents only the value of items for which statistics are available.

No table of limited length can show enough of the dutiable imports to account for anything approaching their total value. The 53 items shown in table 17, however, accounted for slightly less than 70 percent of the total value of dutiable imports from Japan in 1934. The table will give an idea of the diversity of the dutiable imports from Japan and some of the important features of the developments in the trade. Several of the items shown were not separately classified in the earlier years.

It will be noted that for some commodities the values of the Japanese imports have decreased while the quantities have increased. Quantitative data on the imports of some commodities are not available and for a greater number of them the quantity statistics are not significant because of changes in the character or grade of the goods making up the given items. In any case it has frequently been the fall in the dollar prices of the imported Japanese goods rather than the change in the quantities imported that has been the most important competitive factor.

More complete information on imports from Japan is contained in part II of this report, giving statistical data and other information regarding all items of imports from Japan of which the value was as much as $12,000 in 1934, or $8,000 in the first 8 months of 1935.

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A number of the imports shown have been subjects of correspondence addressed by American producers of competing goods to the Tariff Commission. The Commission has also had correspondence regarding competition in United States markets of a number of Japanese products not specifically shown in any compilations in this report, although they may be included in broader classifications. For some commodities the value of imports from Japan has not been as large as the minima which have limited the coverage of the trade attempted in this report. For others the goods are not separately classified in import statistics. The following list includes many items on which the Commission has had recent correspondence with domestic producers and others and which are not covered by name in part II of this report:

Eucalyptol
Flexible shafting
Dental chairs
Dental machines
Dental instruments
Dental foot drills
Dental supplies
Velocipedes
Imitation pearl pins
Typewriter brushes
Toy nursing sets
Toy and small model airplane parts
Mechanical spinning toys
Christmas wreaths
Bill folds
Drive springs
Cigar lighters
Hot-water bottles (rubber)
Photographic mounts
Electric-light bulbs

Features of the Competition of Some Japanese Products in United States Markets.

Many manufactured goods imported from Japan have consisted of the very low-priced grades in their respective lines. Some Japanese goods have been of lower grade than any goods of the same type produced in this country. Some of these goods have apparently provided satisfactory service considering their prices. Others, however, have been so unsatisfactory that the business has not continued after a few shipments.

During the depression the demands of considerable sections of the American market in certain lines of goods shifted from higher- to lower-priced wares. This shift, therefore, tended to maintain or increase the importation of several lines of goods from Japan while the total domestic demands for these lines were shrinking. It should not be assumed, however, that in such cases the Japanese goods always displaced equivalent amounts of domestic goods. With the greatly decreased incomes of consumers during the depression a part of the demand supplied by the low-priced imports from Japan might have gone unfilled had such goods not been available. Moreover, in some lines the Japanese goods have come most directly into competition with goods imported from other countries rather than with domestic goods.

Even taking into account the grades of some goods imported from Japan, they still seem to have been sold at extremely low prices. As a result the Japanese imports may have caused somewhat more disturbance of the markets in this country than might have been expected from the quantities imported. The very low prices of some Japanese goods have been especially conspicuous in the last few years. In many cases this feature of the situation is related to the depreciation of the yen and the entrance of several lines of Japanese goods into the American market in volume for the first time. Depreciation of the yen was not quickly followed by increases in the yen prices of many lines of Japanese goods, especially of goods produced by Japa-

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nese enterprises which had not previously been closely in touch with export markets. It has, therefore, frequently been possible for buyers to obtain such goods in Japan at prices, which in terms of foreign currencies, have been extremely low. Moreover, even in the case of goods already exported in large quantities, the yen prices frequently did not rise appreciably during the earlier period of currency depreciation.

Apparently the initiative in developing the import trade from Japan in several lines of small wares has been taken by American interests. It is reported in some trades that the goods brought in from Japan were manufactured in accordance with specifications and samples provided by American dealers. Such goods are said not to be closely similar to any goods sold in Japan. Frequently imports from Japan developed in this way have apparently resulted from the shift of American dealers from Germany to Japan as a source of supply.

Principal United States Exports to Japan.

In its trade with the United States Japan has increased its purchases of a number of commodities besides raw cotton. The most important commodities in which this was the case are shown in table 18. In all the commodities for which quantity as well as value figures are shown there was an increase in both quantity and value in 1934 as compared with either 1929 or 1931.

TABLE 18.—*Exports from the United States to Japan of important commodities of which exports to Japan were greater in value in 1934 than in 1929*

[Values in thousands of dollars]

	1929	1931	1933	1934
Calf and kip skins:				
Quantity (1,000 pounds)	1,311	1,843	2,971	5,307
Value	$322	$213	$294	$582
Raw cotton:				
Quantity (1,000,000 pounds)	567	914	950	906
Value	$109,399	$79,740	$86,699	$112,178
Sulphite wood pulp:				
Quantity (1,000 pounds)	8	22	45	91
Value	$451	$1,152	$1,959	$5,154
Petroleum, crude:				
Quantity (1,000 barrels)	2,476	3,606	5,533	6,693
Value	$2,911	$3,518	$5,505	$7,944
Gas and fuel oil:				
Quantity (1,000 barrels)	5,172	5,437	5,181	7,917
Value	$4,379	$4,595	$4,430	$7,297
Iron and steel scrap:				
Quantity (1,000 tons)	208	48	548	1,168
Value	$3,090	$843	$4,739	$12,428
Aluminum ingots, scrap and alloy:				
Quantity (1,000 pounds)	195	1,294	5,316	7,880
Value	$31	$96	$516	$1,116
Refined copper, ingots and bars:				
Quantity (1,000 pounds)	7,954	188	28,158	113,769
Value	$1,596	$18	$1,589	$8,266
Brass and bronze, scrap and old:				
Quantity (1,000 pounds)	2,899	2,472	5,061	12,844
Value	$306	$132	$205	$616
Motor trucks, busses, and chassis (except electric):				
Quantity (thousands)	3	4	4	10
Value	$2,226	$1,661	$1,239	$3,139
Automobile passenger cars and chassis:				
Quantity (thousands)	5	5	4	10
Value	$3,892	$2,692	$1,564	$4,638
Phosphate rock (land pebble):				
Quantity (1,000 tons)	231	220	157	214
Value	$827	$830	$486	$881
Potassic fertilizer material:				
Quantity (1,000 tons)	10	23	17	20
Value	$383	$1,046	$600	$752
Total value	$129,813	$96,536	$109,825	$164,991

Source: Foreign Commerce and Navigation of the United States.

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Exports to Japan of some highly manufactured goods, notably automobiles, trucks, and busses, were greater in 1934 than in either 1931 or 1929. However, the most conspicuous increases in our exports to Japan have been of materials for use by Japanese industry, such as raw cotton and unmanufactured or semimanufactured metals. Comparison of the items shown in table 18 with the commodities of which Japanese exports have greatly increased in recent years (see tables 3 and 4) makes it clear that a considerable part of our export trade to Japan is closely associated with the recent expansion of Japanese export trade.

It is probable that some portion of certain materials exported from the United States for use in Japanese industry would have gone to other countries had they not gone to Japan; but it is reasonable to suppose that some of such goods could not have found outlets elsewhere or would have found them only at lower prices than those at which the goods were sold to Japan. Because of the low prices at which the Japanese have been selling their products in foreign markets, the world consumption of certain American materials, especially cotton, has no doubt been greater than would have been the case had the recent expansion of Japanese exports not occurred.

In table 19 the principal exports of the United States to Japan, other than those appearing in table 18, are shown by quantity and value for the years 1929, 1931, 1933, and 1934. This table and table 18 together include the 25 most important items exported from the United States to Japan in either 1929 or 1934.

TABLE 19.—*Exports from the United States to Japan of important commodities of which exports to Japan were less in value in 1934 than in 1929*

[Values in thousands of dollars]

	1929	1931	1933	1934
Cattle hides:				
Quantity (1,000 pounds)	6,800	6,210	8,897	12,739
Value	$986	$497	$584	$946
Rice flour, meal, and broken rice:				
Quantity (1,000 pounds)	47,643	23,978	9,165	None
Value	$1,471	$356	$85	----------
Wheat:				
Quantity (1,000 bushels)	7,003	1,820	664	4,401
Value	$8,515	$904	$353	$2,352
Wheat flour:				
Quantity (1,000 barrels)	277	49	1	4
Value	$1,704	$150	$4	$12
Rubber tire casings (automobile):				
Quantity (number)	130,920	80,737	250	5,316
Value	$1,418	$1,351	$2	$26
Rosin (gum and wood):				
Quantity (1,000 500-pound barrels)	99	102	106	101
Value	$1,403	$818	$678	$826
Leaf tobacco, Bright Flue-cured:				
Quantity (1,000 pounds)	13,969	11,053	6,191	9,405
Value	$4,875	$3,056	$1,126	$1,878
Logs and hewn timber (cedar):				
Quantity (1,000 M feet)	170	114	36	45
Value	$3,731	$2,074	$556	$695
Sawed timber, Douglas fir:				
Quantity (1,000 M feet)	248	207	174	135
Value	$4,756	$2,551	$1,627	$1,627
Boards, planks, and scantlings, rough and dressed:				
Douglas fir:				
Quantity (1,000 M feet)	128	64	26	16
Value	$2,358	$808	$260	$206
Hemlock:				
Quantity (1,000 M feet)	94	45	11	8
Value	$1,889	$719	$129	$119
Gasoline, naphtha, and other finished light products:				
Quantity (1,000 barrels)	913	1,256	967	1,079
Value	$5,038	$4,185	$2,128	$2,650

Source: Foreign Commerce and Navigation of the United States.

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TABLE 19.—*Exports of important commodities from the United States to Japan*—Continued

[Values in thousands of dollars]

	1929	1931	1933	1934
Kerosene:				
Quantity (1,000 barrels)	1,304	370	265	375
Value	$5,466	$1,413	$511	$809
Lubricating oil:				
Quantity (1,000 barrels)	282	231	162	254
Value	$3,299	$2,545	$1,380	$2,017
Wire rods:				
Quantity (1,000 pounds)	45,660	35,284	30,864	41,038
Value	$857	$547	$458	$547
Steel sheets, black:				
Quantity (1,000 pounds)	56,949	5,577	1,404	7,137
Value	$1,933	$219	$38	$222
Tin plate and terneplate:				
Quantity (1,000 pounds)	138,457	40,383	53,633	90,082
Value	$6,988	$1,611	$1,925	$3,628
Welded black pipe:				
Quantity (1,000 pounds)	45,244	9,662	956	8,324
Value	$1,531	$306	$25	$80
Lead, in pigs, bars, etc., from foreign ore:				
Quantity (1,000 pounds)	32,609	34,602	42,472	8,908
Value	$1,584	$973	$758	$215
Automobile parts for replacement, n. e. s: Value	$2,523	$1,197	$476	$1,202
Automobile parts for assembly: Value	$10,036	$2,788	$2,037	$4,088
Sulphate of ammonia:				
Quantity (1,000 tons)	60	5	None	None
Value	$2,523	$135		
Total value	$74,884	$29,203	$15,140	$24,145

Source: Foreign Commerce and Navigation of the United States.

The classifications of exports shown in tables 18 and 19 accounted for about 90 percent of our total exports to Japan in 1934 and about 80 percent in 1929. The remainder of the value of our exports to Japan is accounted for principally by various classes of industrial machinery; electrical equipment and apparatus; logs, timber, and lumber, other than those shown in the tables; other iron and steel products, such as rails and steel bars; and mechanics and other hand tools. Exports of most of these commodities to Japan were considerably smaller in 1934 than in 1929. In some of the smaller items, however, notably sewing machines for factory or industrial use, certain metalworking milling machines, cotton linters, and electrodes for electric furnaces, our exports to Japan were considerably greater in 1934 than in predepression years. (For more complete detail regarding United States exports to Japan, see appendix table 6, p. 86.)

The value of United States exports of some commodities which were less in 1934 than in 1929 had recovered considerably from the level of 1931. Moreover, our exports of a number of commodities to Japan, though less in 1934 than in 1929, constituted a greater percentage of our total exports of these commodities in the later than in the earlier year. Since tables 18 and 19 show exports to Japan only, this feature of the situation is not shown in the tables. (For information on this aspect of United States trade with Japan, see appendix table 6, p. 86.)

Most of the United States exports to Japan, which were smaller in 1934 than in 1929, consist of more highly processed types of goods, such as lubricating oils, photographic and projection goods, and machinery. However, some of the more important declines in United States exports occurred in such cruder items as timber, sawed lumber, wheat, and unmanufactured tobacco.

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Japan's Alternative Sources for Goods Obtained from the United States.

Although the value of United States exports to Japan has increased considerably in recent years, it is important to recognize that Japan has other sources than the United States for her supplies of many of the principal commodities we now send her. In 1934 the value of United States exports to Japan was about $67,000,000 greater than in 1933, and of this increase almost $50,000,000 was accounted for by increases in the value of cotton, crude petroleum, and manufactured and semimanufactured metals. These commodities, which represent approximately 80 percent of the total value of United States exports to Japan in 1934, are all available in world markets, and for none of them is Japan dependent exclusively upon the United States.

In order to ascertain the other countries from which Japan has been obtaining these goods, it is necessary to examine Japanese import statistics. In table 20, therefore, are shown the values of imports into Japan from the United States and from other important sources of the principal goods entering our export trade to Japan. The commodity classifications shown in this table are of course those used in Japanese import statistics. These classifications are not comparable with those shown in the United States official statistics of exports.

Table 20 shows that British India supplies Japan with a large amount of cotton (inferior in quality, however, to that supplied by the United States), and that Egypt and China have also supplied appreciable amounts of this material. Though production in Brazil of cotton, most of it similar in staple and quality to the United States product, has recently been expanded, Brazil has not, at least up to the present, become an important source of Japan's raw-cotton imports. Table 20 also shows that Germany and the United Kingdom are second to the United States as sources of Japan's imports of tin plate; and that in 1934 Canada was only slightly less important than the United States as a supplier of Japan's imports of aluminum. Of the other commodities listed, Australia is the principal source of wheat imports; Canada has been rapidly increasing in importance as a supplier of cedar, pine, and fir boards, planks, and logs, and Germany has displaced the United States as a chief source of metal- and wood-working machines. The predominant position of the United States as a supplier of Japan's imports of automobile parts, crude oil, scrap iron, rosin, copper, internal-combustion engines, and motion-picture films has not been seriously impaired. In iron-wire rods, iron plates and sheets, not coated with metal, and some other products, the United States has maintained its position or increased in importance as a supplier of Japan's imports, but either as the result of a decline in the consumption of these goods in Japan or an increase in Japanese production the total imports of these articles into that country have declined.

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TABLE 20.—*Principal sources of commodities imported into Japan of which the United States is an important supplier*

[Values in thousands of yen]

Commodity and source	1929		1931		1933		1934	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Cotton, ginned, total	$572,639	100.0	$296,115	100.0	$604,468	100.0	$730,936	100.0
United States	276,357	48.3	153,700	51.9	381,655	63.1	400,919	54.9
British India [1]	231,108	40.3	113,255	38.2	168,790	27.9	252,435	34.5
Egypt	22,170	3.9	11,619	3.9	19,085	3.2	39,787	5.5
China	33,546	5.9	17,366	5.9	24,273	4.0	15,650	2.1
All other countries	9,458	1.6	175	.1	10,665	1.8	22,145	3.0
Leaf tobacco, total	9,850	100.0	8,142	100.0	6,240	100.0	8,412	100.0
United States	8,047	81.7	5,546	68.1	3,962	63.5	4,783	56.9
China	916	9.3	998	12.3	1,326	21.2	1,517	18.0
Philippine Islands	337	3.4	572	7.0	554	8.9	1,136	13.5
All other countries	550	5.6	1,026	12.6	398	6.4	976	11.6
Wheat, total	70,396	100.0	32,935	100.0	44,384	100.0	40,749	100.0
United States	15,044	21.4	2,523	7.7	238	.5	9,869	24.2
Australia	15,407	21.9	22,466	68.2	33,887	76.4	22,033	54.1
Canada	35,273	50.1	7,937	24.1	10,243	23.1	8,120	19.9
All other countries	4,672	6.6	9	[2]	16	[2]	727	1.8
Cedar, other than for pencils, pine and fir boards, planks, logs and cants, total	80,166	100.0	37,736	100.0	33,021	100.0	30,127	100.0
United States	66,610	83.1	25,198	66.8	22,904	69.4	20,106	66.7
Canada	5,107	6.4	7,754	20.5	7,602	23.0	9,385	31.2
All other countries	8,449	10.5	4,784	12.7	2,515	7.6	636	2.1
Automobiles, total	9,545	100.0	3,378	100.0	1,864	100.0	3,357	100.0
United States	8,921	93.5	3,093	91.6	1,581	84.8	3,075	91.6
Great Britain	273	2.8	142	4.2	212	11.4	127	3.8
All other countries	351	3.7	143	4.2	71	3.8	155	4.6
Parts of automobiles, other than chassis and tires, total	16,444	100.0	9,734	100.0	10,883	100.0	27,769	100.0
United States	16,313	99.2	9,675	99.4	10,706	98.4	27,534	99.1
Sweden	None		None		2	[2]	106	.4
Great Britain	50	.3	7	.1	140	1.3	70	.3
All other countries	81	.5	52	.5	35	.3	59	.2
Crude oil and heavy oil, total	46,603	100.0	44,063	100.0	68,347	100.0	82,483	100.0
United States	26,091	56.0	24,972	56.7	39,784	58.2	54,475	66.0
Asiatic Russia	4,753	10.2	8,033	18.2	9,412	13.8	8,079	9.8
Netherland India	10,274	22.0	3,740	8.5	5,989	8.8	7,537	9.1
British Borneo	None		1,925	4.4	4,154	6.1	4,446	5.4
Manchuria	None		None		1,729	2.5	1,355	1.7
All other countries	5,485	11.8	5,393	12.2	7,279	10.6	6,591	8.0
Mineral oil, other than heavy oil and crude oil:								
Gravity not exceeding 0.730, total	4,088	100.0	793	100.0	47	100.0	325	100.0
United States	860	21.0	174	21.9	5	10.6	8	2.5
Netherland India	3,228	79.0	619	78.1	41	87.3	317	97.5
Germany	None		None		[3]	[3]		
All other countries					1	2.1		
Gravity not exceeding 0.8017, total			30,730	100.0	30,412	100.0	28,118	100.0
United States			15,861	51.6	12,512	41.1	8,278	29.4
Netherland India			11,691	88.0	14,166	46.6	15,770	56.1
Germany			None		[3]	[3]	[3]	[3]
All other countries			3,178	10.3	3,734	12.3	4,070	14.5

[1] Includes Ceylon.
[2] Less than one-tenth of 1 percent.
[3] Less than 500.

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TABLE 20.—*Principal sources of commodities imported into Japan of which the United States is an important supplier*—Continued

Commodity and source	1929		1931		1933		1934	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Mineral oil, other than heavy oil and crude oil—Continued.								
Gravity not exceeding 0.8762, total	$34,682	100.0	$5,262	100.0	$4,362	100.0	$5,240	100.0
United States	16,622	47.9	3,659	69.5	2,056	47.1	1,821	34.7
Netherland India	14,727	42.5	944	18.0	1,623	37.2	2,630	50.2
Germany	165	.5	142	9.7	248	5.7	323	6.2
All other countries	3,168	9.1	517	2.8	435	10.0	466	8.9
Gravity not exceeding 0.9218, total	4,556	100.0	2,983	100.0	3,979	100.0	5,607	100.0
United States	4,116	90.3	2,587	86.7	3,421	86.0	5,144	91.8
Netherland India	None	----	11	.4	None	----	(1)	(1)
Germany	392	8.6	306	10.3	470	11.8	383	6.8
All other	48	1.1	79	2.6	88	2.2	80	1.4
All other mineral oil, total	2,997	100.0	1,953	100.0	1,714	100.0	2,253	100.0
United States	2,825	94.3	1,823	93.3	1,532	89.4	1,963	87.1
Netherland India	1	(1)	1	.1	None	----	1	.1
Germany	124	4.1	114	5.8	106	6.2	51	2.3
Great Britain	32	1.1	2	.1	66	3.8	183	8.1
All other countries	15	.5	13	.7	10	.6	55	2.4
Sulphate of ammonia, crude, total	48,086	100.0	15,861	100.0	9,421	100.0	13,807	100.0
United States	6,434	13.4	297	1.9	None	----	(1)	(1)
Germany	23,274	48.4	10,984	69.2	6,943	73.7	11,680	84.6
Great Britain	17,666	36.7	3,788	23.9	1,828	19.4	1,833	13.3
Manchuria	None	----	None	----	641	6.8	293	2.1
All other countries	712	1.5	792	5.0	9	.1	1	(1)
Pulp for papermaking, total	13,485	100.0	11,840	100.0	27,066	100.0	44,256	100.0
United States	2,317	17.2	2,418	20.4	7,802	28.8	16,321	36.9
Norway	3,286	24.4	2,013	17.0	7,578	28.0	10,464	23.6
Sweden	1,482	11.0	1,220	10.3	3,572	13.3	7,438	16.8
Canada	4,625	34.3	5,200	43.9	6,043	22.1	7,245	16.4
All other countries	1,775	13.1	989	8.4	2,071	7.8	2,788	6.3
Phosphorite, total	13,454	100.0	7,213	100.0	15,374	100.0	16,677	100.0
United States	4,234	31.5	2,994	41.5	2,718	17.7	3,999	24.0
Egypt	3,002	22.3	1,390	19.3	5,961	38.8	4,787	28.7
All other countries	6,218	46.2	2,829	39.2	6,695	43.5	7,891	47.3
Iron wire rods, total	13,577	100.0	4,219	100.0	5,231	100.0	4,108	100.0
United States	2,497	18.4	1,220	28.9	1,826	34.9	2,235	54.4
Germany	7,590	55.9	2,039	48.3	1,424	27.2	509	12.4
Belgium	906	6.7	222	5.3	649	12.4	409	9.9
Sweden	501	3.7	143	3.4	655	12.5	603	14.7
All other countries	2,083	15.3	595	14.1	677	13.0	352	8.6
Iron plates and sheets, not coated with metal, not exceeding 0.7 mm in thickness, other than silicon sheets, total	12,067	100.0	1,980	100.0	309	100.0	171	100.0
United States	1,952	16.2	19	1.0	10	3.2	143	83.6
Great Britain	7,345	60.9	1,456	73.5	293	94.8	25	14.6
All other countries	2,770	22.9	505	25.5	6	2.0	3	1.8
Iron plates and sheets tinned, total	19,921	100.0	8,490	100.0	22,916	100.0	25,698	100.0
United States	13,244	66.5	3,912	46.1	6,923	30.2	14,667	57.1
Germany	36	.2	1,207	14.2	6,389	27.9	6,176	24.0
Great Britain	6,441	32.3	3,171	37.3	8,149	35.6	2,659	10.3
All other countries	200	1.0	200	2.4	1,455	6.3	2,196	8.6

[1] Less than one-tenth of 1 percent.

[2] Less than 500.

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TABLE 20.—*Principal sources of commodities imported into Japan of which the United States is an important supplier*—Continued

Commodity and source	1929		1931		1933		1934	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Iron waste or old, total	$18,345	100.0	$7,321	100.0	$38,645	100.0	$65,730	100.0
United States	8,282	45.1	824	11.3	16,673	43.1	45,564	69.3
British India [1]	4,840	26.4	2,671	36.5	7,922	20.5	4,575	7.0
Great Britain	680	3.7	1,290	17.6	4,447	11.5	3,876	5.9
All other countries	4,543	24.8	2,536	34.6	9,603	24.9	11,715	17.8
Lead ingots and slabs, total	15,063	100.0	8,127	100.0	11,902	100.0	17,903	100.0
United States	4,474	29.7	2,511	30.9	4,012	33.7	6,823	38.1
Canada	8,178	54.3	4,240	52.2	5,542	46.6	7,406	41.4
British India	1,025	6.8	1,131	14.0	2,012	16.9	3,049	17.0
All other countries	1,386	9.2	245	2.9	336	2.8	625	3.5
Zinc ingots, slabs, and grains, total	8,103	100.0	3,094	100.0	7,462	100.0	7,228	100.0
United States	666	8.2	169	5.5	825	11.1	1,352	18.7
Canada	3,555	43.8	1,506	48.7	3,957	53.0	3,420	47.3
Australia	3,218	39.7	1,198	38.7	2,103	28.2	2,293	31.7
All other countries	664	8.3	221	7.1	577	7.7	163	2.3
Aluminum ingots, slabs, grains, and other, total	11,401	100.0	3,312	100.0	10,233	100.0	12,576	100.0
United States	5,952	52.2	304	9.2	2,178	21.3	4,146	33.0
Great Britain	1,340	11.8	587	17.7	1,623	15.9	290	2.3
Germany	427	3.7	769	23.2	1,807	17.7	499	4.0
Canada	56	.5	730	22.0	2,499	24.4	4,049	32.2
Switzerland	1,996	17.5	719	21.7	1,028	10.0	557	4.4
All other countries	1,630	14.3	203	6.2	1,098	10.7	3,035	24.1
Hides and skins (cow and buffalo), total	10,592	100.0	5,710	100.0	11,709	100.0	14,345	100.0
United States	3,370	31.8	1,949	34.1	4,175	35.6	6,015	41.9
China	5,674	53.6	2,718	47.6	4,484	38.3	4,951	34.5
All other countries	1,548	14.6	1,043	18.3	3,050	26.1	3,379	23.6
Rosin, total	3,739	100.0	2,149	100.0	2,994	100.0	3,161	100.0
United States	3,494	93.5	2,005	93.3	2,741	91.5	2,854	90.3
French Indo-China	91	2.4	57	2.7	110	3.7	113	3.6
British India	None	----	[3]	[3]	5	.2	None	----
All other countries	154	4.1	87	4.0	138	4.6	194	6.1
Chloride of potash, crude, total	3,079	100.0	3,286	100.0	5,009	100.0	5,790	100.0
United States	2,378	77.2	2,438	74.2	2,681	53.5	2,643	45.7
Germany	350	11.4	309	9.4	9	.2	1,066	18.4
Spain	None	----	33	1.0	2,231	44.5	813	14.0
All other countries	351	11.4	506	15.4	88	1.8	1,268	21.9
Copper ingots and slabs, total	3,573	100.0	78	100.0	7,476	100.0	26,171	100.0
United States	2,456	68.7	67	85.9	7,238	96.8	26,138	99.9
All other countries [4]	1,117	31.3	11	14.1	238	3.2	33	.1
Internal combustion engines: Weighing not more than 250 kilograms, total	7,354	100.0	4,205	100.0	1,826	100.0	3,253	100.0
United States	6,630	90.2	3,328	79.1	1,637	89.7	2,980	91.6
Great Britain	603	8.2	633	15.1	108	5.9	199	6.1
All other countries	121	1.6	244	5.8	81	4.4	74	2.3

[1] Includes Ceylon in 1934.
[2] Less than one-tenth of 1 percent.
[3] Less than 500.
[4] China, 1929—3,299,000 kin valued at 1,097,000 yen.

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TABLE 20.—*Principal sources of commodities imported into Japan of which the United States is an important supplier*—Continued

Commodity and source	1929		1931		1933		1934	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Internal combustion engines—Continued. Weighing not more than 2,500 kilograms, total[1]	$5,224	100.0	$5,486	100.0	$13,955	100.0	$17,277	100.0
United States	2,006	38.4	1,049	19.1	4,461	32.0	11,623	67.3
Germany	278	5.3	679	12.4	195	1.4	183	1.0
Great Britain	295	5.7	417	7.6	1,715	12.3	102	.6
All other countries	2,645	50.6	3,341	60.9	7,584	54.3	5,369	31.1
Metal or woodworking machines, total	5,622	100.0	2,969	100.0	16,247	100.0	21,432	100.0
United States	2,477	44.1	1,129	38.0	5,726	35.2	8,810	41.1
Germany	2,165	38.5	1,334	45.0	8,056	49.6	9,246	43.2
Great Britain	741	13.2	363	12.2	1,708	10.5	2,172	10.1
All other countries	238	4.2	143	4.8	757	4.7	1,204	5.6
Sensitized films for cinematographs, total	2,206	100.0	1,985	100.0	3,148	100.0	3,339	100.0
United States	1,624	73.6	1,407	70.9	1,617	51.4	2,467	73.9
Canada	9	.4	7	.4	859	27.3	222	6.6
Germany	217	9.8	173	8.7	184	5.8	272	8.1
Belgium	55	2.5	205	10.3	275	8.7	259	7.8
All other countries	301	13.7	193	9.7	213	6.8	119	3.6

[1] Detail by country does not agree with total. Possibly bonded warehouse manufacturing item not recorded (see 1933 and 1934).

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4. UNITED STATES AND JAPANESE EXPORTS TO THIRD MARKETS

Recent Changes in the Geographic Distribution of United States and Japanese Export Trade.

Table 21 shows for 5 recent years exports from the United States in dollars and from Japan in yen to different areas and countries; table 22 shows for each country the percentage distribution among different areas and countries based on the figures in table 21. It should be emphasized that the data in these tables may not be taken as indicative of distribution of United States and Japanese exports in volume. To determine the distribution on the quantity basis, it would be necessary to take into account the difference in the size of, and the changes from year to year in the purchasing power of the units of currency in which the values are expressed. In the period 1929 to 1934 the average annual foreign exchange value of the yen ranged from 25.65 cents (1933) to 49.39 cents (1930).

It should be borne in mind also that the percentages of Japan's total exports going to the different countries shown in table 22, represent smaller values than are represented by equal percentages of total United States exports. If the yen figures for Japan's exports are converted into dollars at the average annual rates of exchange of the yen for each year, it will be found that the dollar value of Japan's total exports has varied during the years shown from 20 percent (1929) to 30 percent (1934) of the dollar value of total United States exports in the respective years.

Conversion of the yen values of Japanese exports into dollars at the average annual exchange rate for each year would have given a better basis for comparing the volume of United States and Japanese exports to different countries and areas in any given year, especially in 1929 and 1931 before the depreciation of the yen. However, the variations in the yen-dollar exchange rate have not been accompanied by anything like fully compensating adjustments in the relative dollar and yen prices of United States and Japanese exports. The two countries' exports expressed in terms of the national currencies, therefore, provide as good a basis as any available for comparing the changes from year to year in the export trade of the two countries with specific areas of destination. Then, too, the dollar and yen figures for exports to different countries give a better measure of the changes in the distribution of each country's trade than they do of the changes in volume of exports to any particular country.

The average prices of commodities entering into the United States export trade were materially lower in 1934 than in 1929. The decreases in the quantities of United States exports, therefore, were much smaller than the decreases in the dollar figures. Also, the average yen prices of Japanese exports other than raw silk (which goes principally to the United States and of which the yen price was very much lower in 1934 than in 1929) were probably lower in 1934 than in 1929. But the yen prices were not nearly as much below the 1929 level as were the average dollar prices of United States exports. The increases in the quantity of Japanese exports to most markets were, therefore, probably somewhat greater than the increases in yen value, but the disparity between the changes in quantity and the changes in yen value of Japan's exports to various countries was much less than the disparity between the changes in the quantities and dollar values of United States exports.

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TABLE 21.—*Value of exports of merchandise from the United States and from Japan to certain countries and geographic areas*

[In thousands]

Destination	United States domestic exports					Exports from Japan, including reexports				
	1929	1931	1932	1933	1934	1929 (yen)	1931 (yen)	1932 (yen)	1933 (yen)	1934 (yen)
All countries	$5,157,063	$2,377,982	$1,576,151	$1,647,220	$2,100,137	2,148,618	1,146,981	1,409,991	1,861,045	2,171,924
Europe	2,314,818	1,166,218	766,486	838,914	938,326	147,248	104,111	127,176	182,077	227,772
United Kingdom	841,244	449,484	282,063	307,873	378,131	63,183	53,166	60,536	87,849	109,269
France	262,519	118,337	108,150	119,616	113,527	44,494	16,099	21,547	38,736	38,318
Germany	401,694	160,726	130,535	137,937	106,649	13,446	8,423	9,349	12,411	19,677
Netherlands	127,197	64,342	43,770	47,705	50,430	6,917	10,136	12,444	12,325	17,882
Belgium	113,984	58,966	39,710	42,984	49,385	2,890	2,451	4,160	7,739	9,675
Italy	152,534	54,175	48,260	60,767	64,091	6,108	3,215	5,672	6,167	9,579
All other countries	415,646	260,188	113,998	122,032	176,113	10,210	10,621	13,468	16,850	23,372
Asia	642,010	384,161	290,474	291,124	400,078	915,232	505,018	677,613	930,636	1,169,503
China [1]	123,988	97,109	55,722	51,783	68,461	346,652	155,750	155,425	190,324	224,213
Japan	258,548	154,839	133,771	142,920	209,926					
Kwantung	11,834	2,173	1,183	2,660	3,884	124,476	65,541	120,583	221,068	295,868
Netherland India	45,644	15,309	7,757	6,882	10,050	87,125	63,450	100,254	157,487	158,450
Hong Kong	19,410	14,174	9,618	8,434	8,942	61,065	36,754	18,041	23,419	33,497
Philippine Islands	85,414	48,805	44,870	44,645	46,980	30,596	20,425	22,362	24,050	36,460
British Malaya [2]	14,616	4,674	2,487	2,365	4,133	27,928	19,119	25,546	46,133	63,320
U. S. S. R. (Asia) [3]	3,463	231	175	254	130	15,033	14,941	13,065	12,090	11,366
British India and Ceylon	58,146	37,872	25,588	19,787	28,642	198,056	110,367	192,491	205,154	258,012
Siam	3,161	1,306	682	840	1,615	10,633	4,721	8,581	18,124	28,092
All other countries	17,786	7,669	8,621	10,554	17,315	13,668	13,950	21,265	32,787	60,269
Africa	130,389	59,719	35,907	42,840	76,671	60,534	58,868	85,695	137,238	182,396
Egypt	13,992	5,245	2,702	3,788	6,794	31,352	22,829	41,876	55,607	72,988
Union of South Africa	61,069	28,277	15,803	22,030	45,333	13,179	19,282	16,418	26,740	29,539
All other countries	55,328	26,197	17,402	17,022	24,544	16,003	16,757	27,401	54,891	79,869
North America [4]	915,024	384,818	232,750	202,074	292,022	941,180	438,865	453,965	499,156	407,614
United States						914,084	425,330	445,147	492,237	398,928
Canada	902,144	377,544	228,438	197,930	286,532	27,096	13,067	8,562	6,580	8,666
All other countries	12,880	7,274	4,312	4,144	5,490	(5)	468	257	339	20

[1] Includes Manchuria reported separately in Japanese statistics.
[2] Designation in Japanese statistics is "The Straits Settlements."
[3] Designation in Japanese statistics is "Asiatic Russia."
[4] Not including Mexico.
[5] Included with "All other Central America."

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TABLE 21.—*Value of exports of merchandise from the United States and from Japan to certain countries and geographic areas*—Continued

[In thousands]

Destination	United States domestic exports					Exports from Japan, including reexports				
	1929	1931	1932	1933	1934	1929 (yen)	1931 (yen)	1932 (yen)	1933 (yen)	1934 (yen)
Central America, Mexico, and West Indies	$426,540	$184,189	$118,040	$124,027	$175,440	[6] 6,554	3,301	5,130	16,175	43,295
Mexico	132,189	50,988	31,624	36,343	53,718	1,342	666	638	1,491	4,009
Cuba	125,279	46,240	28,396	24,763	44,769	1,256	641	961	3,329	9,985
Salvador	7,983	3,469	2,269	2,307	3,098	(7)	384	394	684	2,289
Panama Canal Zone						(7)	449	551	1,110	1,827
Haiti	8,574	4,757	3,941	3,540	3,363	(7)	(7)	(7)	(7)	8,492
Panama	40,879	23,397	15,496	15,811	18,700	(7)	(7)	(7)	(7)	4,249
Jamaica	9,051	5,516	2,794	2,626	3,772	(7)	(7)	(7)	(7)	2,767
Guatemala	11,436	5,136	2,794	3,072	4,014	(7)	(7)	(7)	(7)	2,275
All other countries	91,149	44,686	30,726	35,565	44,006	3,956	1,161	2,586	9,561	7,402
South America	536,704	157,545	95,969	113,315	160,683	23,025	10,225	13,133	30,379	61,457
Argentina	209,875	52,460	30,988	36,801	42,597	8,579	4,700	7,553	12,261	20,013
Chile	55,564	21,342	3,553	5,278	11,937	2,719	804	286	1,475	7,430
Uruguay	28,178	9,479	3,194	3,597	6,125	4,466	1,150	422	2,451	6,964
Peru	25,995	7,811	3,904	4,888	9,749	2,601	800	840	3,899	6,879
Brazil	108,503	28,505	28,546	29,564	40,190	1,572	642	1,330	2,765	3,063
Colombia	48,070	15,714	10,497	14,576	21,611	(7)	(7)	(7)	(7)	9,004
Venezuela	44,856	15,428	10,111	13,024	19,155	(7)	(7)	(7)	(7)	1,969
All other countries	15,663	6,806	5,176	5,587	9,319	3,088	2,129	2,702	7,528	6,126
Oceania	191,596	41,332	36,525	34,927	56,917	54,842	26,591	47,277	65,380	79,885
Australia	149,871	27,006	26,625	26,148	43,106	44,075	18,405	36,895	51,416	64,461
New Zealand	39,334	13,406	9,206	8,187	12,960	4,094	1,966	2,993	6,452	8,587
Hawaii						6,271	5,623	6,676	6,484	5,526
All other countries [8]	2,391	920	694	592	851	402	597	713	1,028	1,311

[6] May include some "Other North America."
[7] Included in "All other countries."
[8] The Japanese figures may include some countries other than those designated as "Oceania" in the United States statistics.

Source: Foreign Commerce and Navigation of the United States; Annual Return of the Foreign Trade of Japan.

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TABLE 22.—*Percentage distribution of value of merchandise exports from the United States and from Japan to certain countries and geographic areas*

Destination	Domestic exports from the United States					Exports from Japan, including reexports				
	1929	1931	1932	1933	1934	1929	1931	1932	1933	1934
All countries	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Europe	44.9	49.1	48.6	50.9	44.7	6.9	9.1	9.0	9.8	10.5
United Kingdom	16.3	18.9	17.8	18.6	18.0	3.0	4.7	4.3	4.7	5.1
France	5.1	5.0	6.9	7.3	5.4	2.1	1.4	1.5	2.1	1.8
Germany	7.8	6.8	8.3	8.4	5.1	.6	.7	.7	.7	.9
Netherlands	2.5	2.7	2.8	2.9	2.4	.3	.9	.9	.7	.8
Belgium	2.2	2.5	2.5	2.6	2.4	.1	.2	.3	.4	.4
Italy	2.9	2.3	3.1	3.7	3.1	.3	.3	.4	.3	.4
All other countries	8.1	10.9	7.2	7.4	8.3	.5	.9	.9	.9	1.1
Asia	12.4	16.2	18.4	17.7	19.0	42.6	44.0	48.1	50.0	53.8
China [1]	2.4	4.1	3.5	3.2	3.3	16.1	13.6	11.0	10.2	10.3
Japan	5.0	6.5	8.5	8.7	9.9					
Kwantung	.2	.1	.1	.2	.2	5.8	5.7	8.6	11.9	13.6
Netherland India	.8	.6	.5	.4	.5	4.1	5.5	7.1	8.5	7.3
Hong Kong	.4	.6	.6	.5	.4	2.9	3.2	1.3	1.3	1.5
Philippine Islands	1.7	2.1	2.8	2.7	2.2	1.4	1.8	1.6	1.3	1.7
British Malaya	.3	.2	.2	.1	.2	1.3	1.7	1.8	2.5	2.9
U. S. S. R. (Asia)	.1	(2)	(2)	(2)	(2)	.7	1.3	.9	.6	.5
British India and Ceylon	1.1	1.6	1.6	1.2	1.4	9.2	9.6	13.7	11.0	11.9
Siam	.1	.1	.1	(2)	.1	.5	.4	.6	1.0	1.3
All other countries	.3	.3	.5	.7	.8	.6	1.2	1.5	1.7	2.8
Africa	2.5	2.5	2.3	2.6	3.7	2.8	5.1	6.1	7.4	8.4
Egypt	.3	.2	.2	.2	.3	1.5	2.0	3.0	3.0	3.4
Union of South Africa	1.2	1.2	1.0	1.3	2.2	.6	1.7	1.2	1.4	1.3
All other countries	1.0	1.1	1.1	1.1	1.2	.7	1.4	1.9	3.0	3.7
North America [3]	17.8	16.2	14.8	12.3	13.9	43.8	38.3	32.2	26.8	18.8
United States						42.5	37.1	31.6	26.4	18.4
Canada	17.5	15.9	14.5	12.0	13.6	1.3	1.1	.6	.4	.4
All other countries	.3	.3	.3	.3	.3	(2)	.1	(2)	(2)	(2)
Central America, Mexico, and West Indies	8.3	7.7	7.5	7.5	8.4	.3	.3	.4	.9	2.0
Mexico	2.6	2.2	2.0	2.2	2.6	.1	.1	.1	.1	.2
Cuba	2.4	1.9	1.8	1.5	2.1	.1	.1	.1	.2	.5
Salvador	.2	.1	.1	.1	.1	(4)	(4)	(4)	(4)	.1
Panama Canal Zone						(4)	(4)	(4)	.1	.1
Haiti	.2	.2	.3	.2	.2	(4)	(4)	(4)	(4)	.4
Panama	.8	1.0	1.0	1.0	.9	(4)	(4)	(4)	(4)	.2
Jamaica	.2	.2	.2	.2	.2	(4)	(4)	(4)	(4)	.1
Guatemala	.2	.2	.2	.2	.2	(4)	(4)	(4)	(4)	.1
All other countries	1.7	1.9	1.9	2.1	2.1	.1	.1	.2	.5	.3
South America	10.4	6.6	6.1	6.9	7.6	1.1	.9	.9	1.6	2.8
Argentina	4.1	2.2	2.0	2.3	2.0	.4	.4	.5	.7	1.0
Chile	1.1	.9	.2	.3	.6	.1	.1	(2)	.1	.3
Uruguay	.5	.4	.2	.2	.3	.2	.1	(2)	.1	.3
Peru	.5	.3	.2	.3	.5	.1	.1	.1	.2	.3
Brazil	2.1	1.2	1.8	1.8	1.9	.1	.1	.1	.1	.1
Colombia	.9	.7	.7	.9	1.0	(4)	(4)	(4)	(4)	.4
Venezuela	.9	.6	.7	.8	.9	(4)	(4)	(4)	(4)	.1
All other countries	.3	.3	.3	.3	.4	.2	.1	.2	.4	.3
Oceania	3.7	1.7	2.3	2.1	2.7	2.5	2.3	3.3	3.5	3.7
Australia	2.9	1.1	1.7	1.6	2.1	2.0	1.6	2.6	2.8	2.9
New Zealand	.8	.6	.6	.5	.6	.2	.2	.2	.3	.4
Hawaii						.3	.5	.5	.3	.3
All other countries	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	.1	.1

[1] Includes Manchuria reported separately in Japanese statistics.
[2] Less than 1/10 of 1 percent.
[3] Not including Mexico.
[4] Included in all other countries.

Source: Foreign Commerce and Navigation of the United States; Annual Return of the Foreign Trade of Japan.

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The bulk of United States exports go to Europe and Canada, while the bulk of Japan's exports go to Asiatic countries. Moreover, most of the goods which enter prominently into our export trade are not important exports of Japan. As might be expected, therefore, increased exportation from Japan has not been a major factor affecting the total value of exports from the United States. This expectation is to some extent borne out by the data presented in tables 21 and 22, for the areas which have taken substantially smaller percentages of our total exports in 1934 than they did in 1929 are not those in which increased Japanese exports have been an important influence. However, in some commodities and in some areas the increased competition from Japan has been a factor related to the decrease in the exports of the United States between 1929 and 1934. For a discussion of the commodities in which this is the case see below.

The dollar values of United States exports to all markets were less in 1934 than in 1929 but greater in a number of cases than in 1931 and in practically all cases than in 1932. The yen values of Japanese exports to practically all markets, except the United States, Canada, and China were greater in 1934 than in 1929, as well as greater than in 1931 and 1932.

Between 1929 and 1934 some of the largest percentage increases in the yen value of Japan's exports occurred in exports to Central and South American countries. In 1929, however, Japan's export trade to these areas was small, and even with the increases that had occurred, exports to Central and South America accounted for less than 5 percent of Japan's total exports in 1934. There were also great percentage increases in the yen value of Japan's exports to countries in Africa. Africa, as a whole, took 2.8 percent of Japan's total exports in 1929 and 8.4 percent in 1934.

The largest absolute increase in the yen value of Japan's exports to main geographical areas occurred in the country's trade with Asia which had long been the most important market for Japan's exports, especially if raw silk be excluded. The yen value of Japan's exports to Asiatic countries taken as a group was much greater in 1934 than in 1929, notwithstanding the decline of more than 30 percent in the value of Japan's exports to China, formerly Japan's most important Asiatic market. Thus a very large part of the increased yen value of Japan's exports to countries other than the United States and China is accounted for by the increased value of exports to Asiatic countries other than China.

The yen value of Japan's exports to European countries also was considerably greater in 1934 than in 1929, but Japan has never been an important supplier of goods to European markets. Exports to Europe accounted for 6.9 percent of Japan's total exports in 1929, and 10.5 percent in 1934. The portion of the total imports of European countries represented by imports from Japan, moreover, continued small.

Europe has always been the chief market for United States exports, and about 45 percent of the decrease in the dollar value of our total exports in 1934, as compared with 1929, is accounted for by the decrease in the value of exports to Europe. As noted above, the yen value of Japan's exports to Europe increased between 1929 and 1934, but the increase was only a fraction of the decrease in the value of our

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exports to Europe. Our exports to Europe were practically the same percentage of our total exports in 1934 as in 1929.

To Asia and Africa where Japanese exports have been a more important factor than elsewhere, and where the absolute increases in Japan's exports have been greatest, our exports declined proportionately less between 1929 and 1934 than did our total exports to all countries.

United States exports to Canada during the period 1929–34 declined in value proportionately more than did our exports to all countries. The yen value of Japanese exports to Canada also declined severely during the same period.

United States exports to Central America, inclusive of Mexico and the Caribbean countries, represented about the same proportion of total exports to all countries in 1934 as in 1929. As noted above, this was one of the areas to which the yen value of Japanese exports showed the most conspicuous percentage increase. The yen value of Japan's exports to these countries was about 560 percent greater in 1934 than in 1929. Notwithstanding this increase, exports to these markets from the United States were valued at from 13 to 14 times as much in 1934 as exports thereto from Japan. Moreover, the increases in United States sales in these markets between 1932 and 1934 were more than the total value of Japan's sales in 1934.

Exports to South America represented a considerably smaller proportion of total United States exports in 1934 than in 1929. This is the only area in which a much more than proportionate increase in Japan's export trade (more than in proportion to the increase in her total exports to all countries) was accompanied by a much more than proportionate decline in United States exports. In other respects, the situation disclosed by the examination of the export statistics of the United States and of Japan to South American countries is similar to that in Central American countries. That is to say, the increases in Japan's exports to South American countries between 1929 and 1934, though spectacular in terms of percentage gain, were small in absolute amount. United States exports to South American countries in 1934 were valued at more than eight times Japan's exports to these countries. Moreover, the increase in the yen value of Japan's exports to South American countries between 1929 and 1934 was equal to only a small fraction of the decline in the dollar value of United States exports to these markets, and since 1932 the increase in the dollar value of United States exports to South American countries has, in absolute amount, been much greater than the increase in the value of Japan's exports to these countries.

Changes in the exports of the United States and Japan to various countries are shown from another aspect in table 23. This table shows the percentage of the total value of the imports of a number of third countries represented by imports from Japan and from the United States in the years 1929–34. As the figures in this table are computed from the official statistics of the importing countries, the values upon which the percentages are based are values expressed in terms of the currency of each importing country.

To all countries shown in table 23, except the Philippine Islands and China, the United States supplied smaller percentages of the total imports in 1934 than in 1929. With the exception of China and

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Canada, Japan supplied larger percentages of the total imports of all the countries in 1934 than in 1929. The prices of Japanese goods have probably fallen on the average relative to the prices of United States goods because of the fall in the foreign exchange value of the yen relative to the dollar. The quantitative importance of Japan as a supplier of the imports of third markets, therefore, has probably increased more than the figures in the table indicate. However, if full allowance could be made for this factor, it would still be true that, except in Asiatic countries, the decreases in the relative importance of imports from the United States were much greater than the increases in the relative importance of imports from Japan. This indicates that our losses of export trade in most markets have been due chiefly to competition from exporting countries other than Japan, to the development of home industries by the importing countries, or to decreases in the consumption of commodities of which the United States is an important supplier.

On the other hand, in British India and Netherland India, Japan's relative gains have been much greater than our relative losses. In the Philippine Islands, both Japan and the United States have supplied increased percentages of total imports. In certain commodities, notably cotton cloth (see below), imports into the Philippines from Japan have been an important factor causing a decrease in imports from the United States. However, the figures for the total imports of the Philippine Islands indicate that third countries have lost some trade to both the United States and Japan and that the United States has not so far lost an important part of its total trade in the islands to Japan.

TABLE 23.—*Proportion of total imports into certain countries from the United States and Japan*

[All figures are percentages of the total imports of the specified country]

Year	Europe								Africa—Union of South Africa	
	United Kingdom		France		Germany		Belgium			
	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan
1929	16.1	0.7	12.3	0.5	13.3	0.3	9.6	0.1	18.9	1.8
1931	12.1	.8	9.0	.5	11.8	.4	8.8	.1	14.0	4.9
1932	11.9	1.0	9.7	.5	12.7	.4	8.7	.2	13.4	3.8
1933	11.2	1.1	10.3	.6	10.2	.4	8.1	.3	12.6	4.3
1934	11.2	(1)	9.6	.8	8.4	.5	7.3	.4	16.9	3.5

[1] Not available.

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TABLE 23.—*Proportion of total imports into certain countries from the United States and Japan*—Continued

[All figures are percentages of the total imports of the specified country]

Year	Asia									
	China		British India		Netherland India		Philippine Islands		British Malaya	
	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan
1929	18.0	(1)	7.3	9.8	11.8	10.4	62.9	8.1	4.4	0.4
1931	22.2	20.0	10.2	10.6	8.7	15.6	62.7	11.1	3.1	.9
1932	25.7	14.1	8.5	14.4	6.2	19.9	64.6	7.8	2.9	.7
1933	22.1	9.8	6.2	14.2	4.9	30.8	65.0	8.4	2.6	1.0
1934	26.4	12.3	6.7	15.5	6.0	31.6	65.4	12.4	3.4	1.6

Year	North America						Oceania			
	Canada		Cuba		Mexico		Australia [2]		New Zealand	
	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan
1929	68.8	1.0	58.8	0.6	69.1	0.4	24.6	3.3	18.6	1.3
1931	64.7	1.1	57.3	1.0	66.7	.5	18.7	3.9	14.9	1.2
1932	58.2	1.0	54.2	1.0	63.8	.4	15.7	5.4	13.3	1.8
1933	54.2	.8	53.5	2.0	59.9	.6	13.9	6.1	10.4	2.5
1934	57.2	.9	56.2	4.3	60.7	.9	13.5	6.3	11.0	2.6

Year	South America									
	Argentina		Chile		Colombia		Peru		Uruguay	
	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan	Percent from United States	Percent from Japan
1929	26.9	0.5	32.2	0.8	45.9	1.1	41.8	1.2	30.2	1.1
1931	16.0	1.1	34.3	.6	41.9	1.5	40.5	1.6	19.2	.6
1932	13.6	1.6	23.1	.6	42.0	1.3	29.1	1.7	9.7	.8
1933	12.7	2.3	22.4	1.1	36.8	2.2	27.4	4.9	9.2	1.3
1934	14.8	2.2	28.8	3.5	43.9	4.8	27.1	6.0	14.9	3.9

[1] Not available.
[2] Fiscal years ended June 30.

Source: Basic data for 1932, 1933, and 1934 from World Economic Review, 1934, U. S. Department of Commerce; for earlier years the original trade statistics of each country or the reports of the Pan American Union.

NOTE.—The countries shown in this table accounted for 66 percent of the total domestic exports from the United States in 1934 and 50 percent of the exports from Japan.

The addition of the United States exports to Japan and the Japanese exports to the United States and Kwantung, her two largest markets would make these percentages 76 and 82, respectively.

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Exports of Cotton Cloth and all Other Commodities From the United States and From Japan.

Cotton cloth is one of the most important commodities in which United States exporters have met increasingly severe competition from Japan in recent years. For this reason, and because of the relationship between Japan's export trade in cotton cloth and United States exports of raw cotton, special interest attaches to the export trade of the two countries in cotton cloth. The value of United States and Japanese exports of cotton cloth and all other commodities combined to the principal exports markets of the two countries for that commodity is shown in table 24. Exports of cotton cloth in square yards are shown in table 25.

TABLE 24.—*Exports of cotton cloth and all other commodities from the United States and from Japan to principal markets*

[Values in thousands]

Country of destination and year	Domestic exports from the United States				Domestic exports from Japan			
	Total value	Cotton cloth		Value of all other commodities	Total value	Cotton cloth		Value of all other commodities
		Value	Percent of total			Value	Percent of total	
All countries:					*Yen*	*Yen*		*Yen*
1929	$5,157,083	$71,548	1.4	$5,085,535	2,103,719	412,707	19.6	1,691,012
1931	2,377,982	34,202	1.4	2,343,780	1,121,580	198,732	17.7	922,848
1932	1,576,151	26,619	1.7	1,549,532	1,365,812	288,713	21.1	1,077,099
1933	1,647,220	22,970	1.4	1,624,250	1,832,315	383,215	20.9	1,449,100
1934	2,100,137	23,915	1.1	2,076,222	2,139,195	492,351	23.0	1,646,844
United Kingdom:								
1929	841,244	1,664	.2	839,580	72,537	865	1.2	71,672
1931	449,484	842	.2	448,642	52,321	295	.6	52,026
1932	282,063	38		282,025	60,638	445	.7	60,193
1933	307,873	25		307,848	87,650	2,657	3.0	84,993
1934	378,131	102		378,029	108,243	751	.7	107,492
Turkey:								
1929	5,742	83	1.4	5,659	2,545	2,210	86.8	335
1931	1,684	19	1.1	1,665	3,790	3,507	92.5	283
1932	1,506	3	.2	1,503	5,964	5,574	93.5	390
1933	1,298	45	3.5	1,253	2,432	2,038	83.8	394
1934	2,697	31	1.1	2,666	2,194	1,393	63.5	801
China: [1]								
1929	123,988	174	.1	123,814	318,307	150,116	47.2	168,191
1931	97,109	112	.1	96,997	143,280	43,073	30.1	100,207
1932	55,722	120	.2	55,602	129,105	40,422	31.3	88,683
1933	51,783	56	.1	51,727	179,071	47,219	26.4	131,852
1934	68,461	37	.1	68,424	212,953	53,283	25.0	159,670
Kwantung:								
1929	11,834	9	.1	11,825	114,498	15,358	13.4	99,140
1931	2,173	[2]		2,173	57,135	6,173	10.8	50,962
1932	1,183	3	.3	1,180	107,721	16,108	15.0	91,613
1933	2,660	1		2,659	208,150	18,822	9.0	189,328
1934	3,884	1		3,883	282,270	19,217	6.8	263,053
Hong Kong:								
1929	19,410	113	.6	19,297	60,418	20,785	34.4	39,633
1931	14,174	104	.7	14,070	36,535	9,765	26.7	26,770
1932	9,618	144	1.5	9,474	17,992	3,755	20.9	14,237
1933	8,434	49	.6	8,385	23,399	5,675	24.3	17,724
1934	8,942	47	.5	8,895	33,371	7,311	21.9	26,060
Straits Settlements: [3]								
1929	14,616	553	3.8	14,063	27,795	5,797	20.9	21,998
1931	4,674	105	2.2	4,569	19,059	5,213	27.4	13,846
1932	2,487	93	3.7	2,394	25,494	11,229	44.0	14,265
1933	2,365	28	1.2	2,337	46,047	17,607	38.2	28,440
1934	4,133	27	.7	4,106	63,114	17,394	27.6	45,720
Siam:								
1929	3,161	32	1.0	3,129	10,623	3,815	35.9	6,808
1931	1,306	2	.2	1,304	4,716	796	16.9	3,920
1932	682	[2]		682	8,578	3,404	39.7	5,174
1933	840	[2]		840	18,120	6,767	37.3	11,353
1934	1,615	[2]		1,615	28,015	10,818	38.6	17,197

[1] Includes Manchuria shown separately in Japanese statistics.
[2] Less than $500.
[3] Designated "British Malaya" in United States statistics.

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TABLE 24.—*Exports of cotton cloth and all other commodities from the United States and from Japan to principal markets*—Continued

[Values in thousands]

Country of destination and year	Domestic exports from the United States				Domestic exports from Japan			
	Total value	Cotton cloth		Value of all other commodities	Total value	Cotton cloth		Value of all other commodities
		Value	Percent of total			Value	Percent of total	
British India and Ceylon:					*Yen*	*Yen*		*Yen*
1929	$58,146	$1,476	2.5	$56,670	197,643	109,139	55.2	88,504
1931	37,872	336	.9	37,536	110,296	49,866	45.2	60,430
1932	25,588	151	.6	25,437	192,067	80,653	42.0	111,414
1933	19,787	41	.2	19,746	205,118	71,433	34.8	133,685
1934	28,642	62	.2	28,580	257,857	74,133	28.7	183,724
Netherland India:								
1929	45,644	1,395	3.1	44,249	86,674	42,283	48.8	44,391
1931	15,309	281	1.8	15,028	63,427	28,279	44.6	35,148
1932	7,757	130	1.7	7,627	100,168	50,229	50.1	49,939
1933	6,882	58	.8	6,824	157,402	78,273	49.7	79,129
1934	10,050	331	3.3	9,719	158,333	82,828	52.3	75,505
Philippine Islands:								
1929	85,414	10,079	11.8	75,335	30,332	5,629	18.6	24,703
1931	48,805	5,773	11.8	43,032	20,158	4,162	20.6	15,996
1932	44,870	8,397	18.7	36,473	22,250	2,769	12.4	19,481
1933	44,645	7,060	15.8	37,585	23,909	6,780	28.4	17,129
1934	46,980	5,205	11.1	41,775	36,243	13,206	36.4	23,037
Egypt:								
1929	13,992	553	4.0	13,439	31,344	24,410	77.9	6,934
1931	5,245	135	2.6	5,110	22,785	14,956	65.6	7,829
1932	3,702	7	.3	2,695	41,872	27,068	64.6	14,804
1933	3,788	7	.2	3,781	55,574	38,351	69.0	17,223
1934	6,794	10	.1	6,784	72,956	46,834	64.2	26,122
Union of South Africa:								
1929	61,069	2,120	3.5	58,949	13,179	3,056	23.2	10,123
1931	28,277	1,102	3.9	27,175	19,276	5,451	28.3	13,825
1932	15,803	614	3.9	15,189	16,377	5,342	32.6	11,035
1933	22,030	205	.9	21,825	26,731	5,912	22.1	20,819
1934	45,333	201	.4	45,132	29,520	4,459	15.1	25,061
Canada:								
1929	902,144	8,599	1.0	893,545	27,083	95	.4	26,988
1931	377,544	3,555	.9	373,989	13,049	56	.4	12,993
1932	228,438	1,984	.9	226,454	8,552	52	.6	8,500
1933	197,930	1,452	.7	196,478	6,565	42	.6	6,523
1934	286,532	1,526	.5	285,006	8,654	40	.5	8,614
Costa Rica: [1]								
1929	8,261	822	10.0	7,439				
1931	3,509	519	14.8	2,990				
1932	2,423	460	19.0	1,963				
1933	2,408	336	14.0	2,072				
1934	3,095	310	10.0	2,785				
Guatemala: [1]								
1929	11,436	1,258	11.0	10,178				
1931	5,136	697	13.6	4,439				
1932	2,794	420	15.0	2,374				
1933	3,072	497	16.2	2,575				
1934	4,014	486	12.1	3,528	2,276	1,080	47.5	1,196
Honduras: [1]								
1929	12,719	1,597	12.6	11,122				
1931	5,911	607	10.3	5,304				
1932	4,432	594	13.4	3,838				
1933	4,976	689	13.8	4,287				
1934	5,866	663	11.3	5,203	1,167	631	54.1	536
Nicaragua: [1]								
1929	6,952	973	14.0	5,979				
1931	3,530	647	18.3	2,883				
1932	1,972	518	26.3	1,454				
1933	2,075	491	23.7	1,584				
1934	2,478	656	26.5	1,822				
Panama: [2]								
1929	40,879	913	2.2	39,966				
1931	23,397	532	2.3	22,865				
1932	15,496	388	2.5	15,108				
1933	15,811	408	2.6	15,403				
1934	18,700	381	2.0	18,319	4,250	856	20.1	3,394

[1] Not separately reported in Japanese statistics.
[2] Not separately reported in Japanese statistics until 1934.

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TABLE 24.—*Exports of cotton cloth and all other commodities from the United States and from Japan to principal markets*—Continued

[Values in thousands]

Country of destination and year	Domestic exports from the United States				Domestic exports from Japan			
	Total value	Cotton cloth		Value of all other commodities	Total value	Cotton cloth		Value of all other commodities
		Value	Percent of total			Value	Percent of total	
Salvador: [6]					*Yen*	*Yen*		*Yen*
1929	$7,983	$1,267	15.9	$6,716				
1931	3,469	714	20.6	2,755	384	57	14.8	327
1932	2,269	638	28.1	1,631	394	123	31.2	271
1933	2,307	499	21.6	1,808	685	285	41.6	400
1934	3,098	673	21.7	2,425	2,289	1,463	63.9	826
Jamaica: [5]								
1929	9,051	1,192	13.2	7,859				
1931	5,516	721	13.1	4,795				
1932	2,794	221	7.9	2,573				
1933	2,626	87	3.3	2,539				
1934	3,772	226	6.0	3,546	2,768	949	34.3	1,819
Cuba:								
1929	125,279	9,322	7.4	115,957	1,256	14	1.1	1,242
1931	46,240	4,746	10.3	41,494	639	52	8.1	587
1932	28,396	3,385	11.9	25,011	961	71	7.4	890
1933	24,763	3,066	12.4	21,697	3,329	663	19.9	2,666
1934	44,769	6,771	15.1	37,998	9,985	3,190	31.9	6,795
Dominican Republic: [4]								
1929	13,651	2,024	14.8	11,627				
1931	5,865	1,144	19.5	4,721				
1932	4,535	1,045	23.0	3,490				
1933	5,435	1,191	21.9	4,244				
1934	5,742	1,061	18.5	4,681				
Haiti, Republic of: [5]								
1929	8,574	1,716	20.0	6,858				
1931	4,757	1,157	24.3	3,600				
1932	3,941	1,173	29.8	2,768				
1933	3,540	858	24.2	2,682				
1934	3,363	281	8.4	3,082	8,492	6,934	81.7	1,558
Argentina:								
1929	209,875	3,507	1.7	206,368	8,579	4,164	48.6	4,415
1931	52,460	1,534	2.9	50,926	4,700	1,408	30.0	3,292
1932	30,988	1,177	3.8	29,811	7,548	3,295	43.7	4,253
1933	36,801	795	2.2	36,006	12,262	6,616	54.0	5,646
1934	42,597	116	.3	42,481	20,002	13,956	69.8	6,046
Brazil:								
1929	108,503	523	.5	107,971	1,546	5	.3	1,541
1931	28,505	48	.2	28,457	635	17	2.7	618
1932	28,546	17	.1	28,529	1,327	41	3.1	1,286
1933	29,564	20	.1	29,544	2,765	119	4.3	2,646
1934	40,190	8		40,182	3,019	55	1.8	2,964
Colombia: [5]								
1929	48,070	2,963	6.2	45,107				
1931	15,714	2,198	14.0	13,516				
1932	10,497	1,971	18.8	8,526				
1933	14,576	1,906	13.1	12,670				
1934	21,611	1,585	7.3	20,026	9,003	5,359	59.5	3,644
Chile:								
1929	55,564	3,424	6.2	52,140	2,719	1,068	39.3	1,651
1931	21,342	1,093	5.1	20,249	804	372	46.3	432
1932	3,553	386	10.9	3,167	286	192	67.1	94
1933	5,278	712	13.5	4,566	1,476	1,224	82.9	252
1934	11,937	1,074	9.0	10,863	7,440	6,073	81.6	1,367
Venezuela: [5]								
1929	44,856	1,779	4.0	43,077				
1931	15,428	778	5.0	14,650				
1932	10,111	457	4.5	9,654				
1933	13,024	487	3.7	12,537				
1934	19,155	479	2.5	18,676	1,970	1,021	51.8	949
Australia:								
1929	149,871	1,939	1.3	147,932	43,831	2,927	6.7	40,904
1931	27,006	843	3.1	26,163	18,240	2,857	15.7	15,383
1932	26,625	258	1.0	26,367	36,190	4,875	13.5	31,315
1933	26,148	247	.9	25,901	51,002	10,030	19.7	40,972
1934	43,106	286	.7	42,820	64,433	14,784	22.9	49,649

[4] Not separately reported in Japanese statistics.
[5] Not separately reported in Japanese statistics until 1934.
[6] Not separately reported in Japanese statistics in 1929.

Source: Foreign Commerce and Navigation of the United States; Annual Return of the Foreign Trade of Japan.

NOTE.—This table includes all countries to which either the United States or Japan exported 1 percent or more in value of their respective total exports of cotton cloth in any of the years shown.

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TABLE 25.—*Quantity of exports of cotton cloth from the United States and from Japan to principal markets*

[In thousands of square yards]

Destination	Domestic exports from the United States					Domestic exports from Japan				
	1929	1931	1932	1933	1934	1929	1931	1932	1933	1934
All countries	$539,356	$360,586	$371,201	$299,569	$223,481	1,790,560	1,413,780	2,033,722	2,090,225	2,570,233
Europe: United Kingdom	8,995	5,242	224	138	448	4,001	2,221	3,077	13,946	3,746
Asia:										
China [1]	1,025	1,093	1,419	599	268	530,605	239,445	202,597	203,394	222,873
Kwantung	44	6	25	5	8	56,228	37,934	88,841	86,046	83,636
Hong Kong	412	703	1,235	389	260	84,513	63,450	23,388	28,691	36,292
Straits Settlements [2]	3,100	781	907	234	134	29,472	41,305	82,297	95,742	90,989
Siam	196	15	3	(3)	2	17,833	5,884	24,459	39,830	60,555
British India and Ceylon	11,203	3,791	2,172	613	625	581,105	404,411	644,685	451,605	451,640
Netherland India	7,968	2,608	1,366	454	2,143	193,443	212,107	352,286	423,031	440,978
Philippine Islands	79,147	61,501	116,384	87,807	47,613	26,550	33,423	21,408	34,910	75,747
Turkey	458	170	26	843	241	10,727	25,150	41,531	11,222	7,774
Total, these countries	103,553	70,668	123,537	90,944	51,294	1,530,476	1,063,109	1,481,492	1,374,471	1,470,484
Africa:										
Egypt	3,897	1,408	90	62	84	107,404	103,799	195,534	210,350	233,686
Union of South Africa	12,135	7,960	5,708	1,530	1,229	13,788	39,033	36,370	26,102	16,178
Total, these countries	16,032	9,368	5,798	1,592	1,313	121,192	142,832	231,904	236,452	249,864
North America: Canada	68,749	36,109	26,105	16,915	12,270	448	355	294	217	211
Central America and West Indies:										
Costa Rica	5,950	6,144	6,252	4,888	2,958	(4)	(5)	(5)	(5)	(5)
Guatemala	9,949	7,506	6,430	7,024	4,667	(4)	(5)	(5)	(5)	5,581
Honduras	13,342	6,531	8,761	9,856	6,755	(4)	(5)	(5)	(5)	3,505
Nicaragua	8,693	7,489	7,682	7,429	6,643	(4)	(5)	(5)	(5)	(5)
Panama	6,904	5,263	5,145	4,706	2,913	(4)	(5)	(5)	(5)	4,212
Salvador	11,992	9,995	12,038	9,637	8,837	(4)	395	799	1,558	8,989

[1] Includes Manchuria, reported separately in Japanese statistics.
[2] United States statistics are designated "British Malaya."
[3] Less than 1,000 square yards.
[4] Not separately reported.
[5] Included in total.

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TABLE 25.—*Quantity of exports of cotton cloth from the United States and from Japan to principal markets*—Continued

Destination	Domestic exports from the United States					Domestic exports from Japan				
	1929	1931	1932	1933	1934	1929	1931	1932	1933	1934
Central America and West Indies—Continued.										
Jamaica	$11,462	$10,240	$4,782	$1,800	$3,048	(4)	(3)	(3)	(3)	5,068
Cuba	74,041	53,560	49,468	44,582	67,018	72	371	523	3,614	17,576
Dominican Republic	15,535	12,507	14,019	14,870	9,029	(4)	(3)	(3)	(3)	(3)
Haiti, Republic of	14,456	14,720	19,305	13,138	2,542	(4)	(3)	(3)	(3)	35,729
Total, these countries	172,324	133,955	133,822	117,930	114,590	(3)	[6] 2,784	[6] 3,668	[6] 20,363	[6] 91,008
South America:										
Argentina	22,172	12,828	14,671	9,272	976	17,640	10,540	22,415	34,951	66,365
Colombia	25,660	26,359	27,887	25,581	15,975	(4)	(4)	(4)	(4)	25,848
Chile	27,871	13,053	6,967	11,093	11,955	4,479	2,360	1,256	6,535	31,737
Venezuela	12,025	7,778	5,571	4,913	3,409	(4)	(4)	(4)	(4)	5,448
Total, these countries	87,728	60,018	55,096	50,859	32,315					129,398
Oceania: Australia	8,241	4,900	2,185	1,785	1,567	13,765	20,939	35,994	54,902	74,498

[3] Less than 1,000 square yards.
[4] Not separately reported.
[5] Included in total.
[6] Total Central America and West Indies, not including Mexico.

Source: Foreign Commerce and Navigation of the United States; Annual Return of the Foreign Trade of Japan.

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In 1929 Japan's export trade in cotton cloth, both in value and in square yards, was about 3 times as large as United States exports of this commodity; in 1934 it was more than 10 times as large in quantity and about 7 times as large in value. Since 1929 our export trade in this product to all markets has declined, while Japan's has increased to practically all countries except China and British India. Japanese increases in this trade have usually been much greater than United States losses.

Exports of cotton cloth have accounted for less than 2 percent of the total value of United States exports in all years, and in the period 1929–34 they declined in value proportionately more than did total United States exports of all commodities. On the other hand, Japanese exports of this product have accounted for a large and increasing proportion of the value of total Japanese exports. A large part (30 percent) of the increase in the yen value of Japan's total exports in 1934 as compared with 1931 is accounted for by the greater value of exports of cotton cloth. Excluding raw silk, Japan's exports were 520 million yen greater in 1934 than in 1929. Of this increase, 274 million yen was accounted for by the greater value of exports of cotton cloth. This increase occurred nothwithstanding the severe decline in exports of this commodity to China and British India, formerly Japan's much most important markets for cotton cloth. To many areas indeed, increases in the yen value of total Japanese exports are largely accounted for by cotton cloth.

Total exports from Japan to the Philippine Islands were about 6 million yen greater in 1934 than in 1929, although exports of cotton cloth to that market were 7½ million yen greater. Comparing this trade in 1934 with 1931, the total exports increased by about 16 million yen and cotton cloth accounted for about 9 million yen of the increase. About 7 million of the 17½ million yen increase in the value of Japan's exports to Siam between 1929 and 1934 is accounted for by the increase in the cotton-cloth trade. In the trade with the Straits Settlements about half, and in that with Netherland India well over half, of the increases in the yen value of Japan's exports since 1929 are attributable to the increased value of exports of cotton cloth. Similarly, from 20 percent to practically all of the increases in the total value of Japan's exports to Egypt and to the Central and South American countries shown in table 24 are accounted for by the increased value of exports of cotton cloth.

United States exports of cotton cloth have gone principally to the Philippine Islands, Canada, Cuba, and Central and South American countries. In the case of these, as well as other countries, our exports of cotton cloth were much lower, both in dollar value and in quantity, in 1934 than in 1929, and in practically all cases our cotton-cloth trade has recovered in the last two years little, if any, of the losses sustained in the first years of the depression. In fact, our exports of this commodity to the Philippine Islands decreased sharply in 1933 and 1934. However, the trade to this market had shown a substantial increase in 1932 over 1931, presumably because of the disinclination of Chinese merchants in the Philippine Islands to handle Japanese goods.

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Exports Other Than Cotton Cloth Which Have Met Most Severe Competition From Japan in Foreign Markets.

Examination of the import statistics of British India, the Philippines, the Union of South Africa, and Australia discloses that the commodities other than cotton cloth imported in most substantial volume from both the United States and Japan in 1929 were rubber-soled canvas footwear, tinned fish, electric bulbs and tubes, enameled ware and cutlery, some classes of chemicals, table glassware, floor coverings, some classes of cosmetics, and bicycles. It is reasonable to suppose that exports of these general classes of commodities are those that have met the most severe competition in other markets as well as those of which the import statistics were examined.

Exports of rubber-soled canvas footwear from the United States had practically ceased by 1934, and probably an important factor contributing to this loss of trade was the increased exportation of such goods by Japan. In certain other classifications of the imports of third countries, it is impossible to determine whether the articles imported from the United States and Japan and reported in the same classification are closely similar goods. For instance, a single import classification usually includes electric-light bulbs and radio tubes, and the proportion of these two articles as well as of the different types and sizes of each commodity imported from the United States and Japan may differ materially. Similarly, chemical classification may include very different goods. As a result it is difficult to determine the extent to which the changes in the imports from Japan and from the United States are closely related.

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5. APPENDIXES

Summary of Statistical Data

Additional statistical data pertaining to this report are contained in the following appendixes:

Appendix A shows the foreign trade of both the United States and Japan, with all countries and with each other by principal groups of commodities.

Appendix B gives more complete statistics of United States exports to Japan and of Japan's export and import trade than are given in the body of the report.

Appendix C consists of tables showing imports of raw silk into the United States from Japan and from all other countries, also exports of raw silk from Japan to the United States and to other countries.

Appendix D shows United States exports of raw cotton to Japan and other principal markets and Japanese imports of raw cotton from the United States and other principal suppliers.

Appendix A

Table 1 shows the foreign trade of Japan by main economic classes of commodities. Table 2 gives the trade between the United States and Japan by main economic classes as shown in United States statistics.

It should be noted that the United States and Japanese classifications of commodities into the main economic classes do not agree. The most important difference is with respect to the classification of raw silk, which is recorded as a semimanufacture in Japanese statistics and as a crude material in United States statistics. As a result, the United States figures show large imports of crude materials from Japan, while the Japanese figures show raw materials as only small percentages of the country's total exports.

Table 3 shows the percentages of total United States exports and imports and of exports to, and imports from, Japan represented by the main economic classes of commodities. Crude materials constituted much larger percentages of both the imports from and exports to Japan than of our total export and import trade with all countries.

In considering the distribution of trade by economic classes over a short period, such as that covered in tables 1 and 3, attention should be called to the changes in the relative prices of goods entering the trade, for such price changes render the figures less significant than they would otherwise be as indications of shifts in the character of the trade. For instance, as is shown in table 1, manufactured goods accounted for a much larger percentage of the value of total exports from Japan in 1934 than in 1929. Only in part, however, is this attributable to a change in the composition of the country's export trade. In part, it is attributable to the decline in the price of raw silk, which has resulted in the percentages of the total value of exports represented by all classes other than semimanufactures being considerably greater in the later years than they would otherwise have been. While it is doubtless true that, even in the few years covered, Japan has become increasingly an exporter of manufactured goods, the change in the composition of its export trade has not been as great as a distribution based on value figures indicates.

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TABLE 1.—*Foreign trade of Japan by classes of commodities*

[Values in thousands of yen]

Year	Foodstuffs (including tobacco and beverages)				Raw materials	
	Natural state	Prepared or semi-prepared	Total value	Percent of total	Value	Percent of total
IMPORTS						
1929	214,362	56,794	271,156	12.2	1,223,917	55.2
1930	147,578	60,718	208,296	13.5	828,572	53.6
1931	111,205	47,407	158,612	12.8	684,338	55.4
1932	130,639	30,032	160,672	11.2	838,799	58.6
1933	131,163	42,021	173,185	9.0	1,181,146	61.6
1934	125,936	48,513	174,449	7.6	1,400,210	61.4
EXPORTS						
1929	48,155	111,963	160,118	7.5	88,739	4.1
1930	42,060	86,760	128,820	8.8	64,497	4.4
1931	37,663	64,634	102,297	8.9	44,802	3.9
1932	26,768	77,561	104,329	7.4	51,066	3.6
1933	30,320	127,667	157,987	8.5	73,764	4.0
1934	48,316	123,615	171,931	7.9	95,739	4.4

Year	Semimanufactures [1]		Manufactured goods		Miscellaneous		Total	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	All commodities	Percent of total
IMPORTS								
1929	355,393	16.1	345,913	15.6	19,861	0.9	2,216,240	100.0
1930	236,427	15.3	255,009	16.5	17,767	1.1	1,546,071	100.0
1931	181,136	14.7	197,534	16.0	14,053	1.1	1,235,673	100.0
1932	201,231	14.1	219,619	15.3	11,138	.8	1,431,461	100.0
1933	328,799	17.2	220,328	11.5	13,761	.7	1,917,219	100.0
1934	415,841	18.2	276,219	12.1	15,812	.7	2,282,530	100.0
EXPORTS								
1929	883,775	41.1	937,307	43.6	78,680	3.7	2,148,619	100.0
1930	524,099	35.6	691,190	47.0	61,246	4.2	1,469,852	100.0
1931	422,844	36.9	532,930	46.5	44,108	3.8	1,146,981	100.0
1932	486,199	34.5	700,509	49.7	67,886	4.8	1,409,991	100.0
1933	538,793	28.9	1,031,576	55.4	58,923	3.2	1,861,045	100.0
1934	498,529	23.0	1,345,512	61.9	60,214	2.8	2,171,925	100.0

[1] Includes raw silk which is classified as a crude material in United States statistics.

Source: Annual Return of the Foreign Trade of Japan.

TABLE 2.—*Foreign trade of the United States with Japan by economic classes*

[Values in thousands of dollars]

Year	Crude materials other than foodstuffs [1]	Crude foodstuffs	Manufactured foodstuffs	Semimanufactures	Finished manufactures other than foodstuffs	Total
IMPORTS						
1929	366,961	9,251	8,739	8,888	38,034	431,873
1930	228,395	7,511	6,832	9,782	26,519	279,040
1931	168,144	5,350	5,356	4,507	22,992	206,349
1932	110,866	2,721	3,981	2,843	13,601	134,011
1933	96,565	2,627	5,814	5,490	17,921	128,418
1934 [2]	76,975	3,425	5,055	6,916	25,592	117,964
EXPORTS						
1929	124,570	8,801	6,698	46,903	71,576	258,548
1930	77,183	6,721	3,987	29,321	46,830	164,042
1931	91,884	1,134	3,554	22,725	35,543	154,839
1932	94,794	252	1,790	16,668	20,643	134,147
1933	96,823	467	989	25,631	19,011	142,921
1934	126,749	2,480	864	48,332	31,501	209,926

[1] Includes raw silk which is classified as a semimanufacture in Japan's statistics.
[2] Imports for consumption; general imports in other years.

Source: Foreign Commerce and Navigation of the United States.

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TABLE 3.—*Percentage distribution of total trade of the United States with all countries and with Japan, by economic classes*

Year	Crude materials other than foodstuffs		Crude foodstuffs		Manufactured foodstuffs		Semimanufactures		Finished manufactures other than foodstuffs	
	All countries	Japan	All countries	Japan	All countries	Japan	All countries	Japan	All countries	Japan
IMPORTS										
1929	35.4	85.0	12.2	2.1	9.6	2.0	20.2	2.1	22.6	8.8
1930	32.7	81.9	13.1	2.7	9.6	2.4	19.9	3.5	24.7	9.5
1931	30.7	81.5	14.6	2.6	10.6	2.6	17.8	2.2	26.3	11.1
1932	27.1	82.7	17.6	2.0	13.2	3.0	16.4	2.1	25.7	10.1
1933	28.8	75.2	14.6	2.0	14.1	4.5	20.1	4.3	22.2	14.0
1934 [1]	28.2	65.3	15.5	2.9	16.1	4.3	18.8	5.9	21.4	21.7
EXPORTS										
1929	22.2	48.2	5.2	3.4	9.4	2.6	14.1	18.1	49.1	27.7
1930	21.9	47.1	4.7	4.1	9.6	2.4	13.6	17.9	50.2	28.5
1931	23.8	59.3	5.3	.7	10.4	2.3	13.4	14.7	47.1	23.0
1932	32.6	70.7	5.7	.2	9.7	1.3	12.5	12.4	39.6	15.4
1933	35.9	67.7	2.9	.3	9.4	.7	14.4	17.9	37.4	13.3
1934	31.1	60.4	2.8	1.2	8.0	.7	16.3	23.0	41.8	15.0

[1] Imports for consumption; general imports in other years.

Source: Foreign Commerce and Navigation of the United States.

APPENDIX B

Principal imports into Japan are shown in table 4. In this presentation imports in which the United States is an important supplier are segregated as group A; imports of which the United States is not an important source of supply are designated as group B. Principal sources of the various imports ranked according to their importance in 1934 are also shown in this table.

Table 5 shows Japan's principal exports arranged as are the statistics of imports in table 4.

Table 6 gives the principal exports from the United States to Japan. This tabulation covers exports of these commodities to all countries and to Japan.

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TABLE 4.—*Imports into Japan from the United States and from all countries of commodities important in Japan's import trade*

[Value in thousands of yen; 1 kin=1.3228 pounds]

Commodity	Imports from— All countries					United States					Principal sources in 1934 based on value
	1928	1929	1931	1933	1934	1928	1929	1931	1933	1934	
GROUP A. IMPORTS OF WHICH THE UNITED STATES IS A MAJOR SUPPLIER											
Cotton, ginned:											
Quantity.....100 kin	9,729,662	10,762,827	11,135,402	12,457,818	13,525,151	3,871,587	4,485,130	5,321,022	7,434,873	6,486,727	(1) United States.
Value	549,612	572,639	296,115	604,468	730,936	245,925	276,357	153,700	381,655	400,919	(2) British India.
											(3) Egypt.
Leaf tobacco:											
Quantity.....100 kin	110,171	115,367	121,564	67,488	132,176	67,035	82,006	64,694	27,902	58,710	(1) United States.
Value	8,270	9,850	8,142	6,240	8,412	6,790	8,047	5,546	3,962	4,782	(2) China.
											(3) Philippine Islands.
Broken rice:											
Quantity.....100 kin	2,455,166	2,490,083	2,011,258	2,199,683	None	273,213	354,356	275,871	88,107	None	
Value	15,583	17,844	6,529	10,474	None	2,457	3,225	1,271	581	None	
Wheat:											
Quantity.....100 kin	10,957,356	12,231,557	12,039,531	8,520,470	8,155,061	2,456,805	2,439,587	884,210	49,367	2,220,803	(1) Australia.
Value	67,787	70,396	32,935	44,384	40,749	15,915	15,044	2,523	238	9,869	(2) United States.
											(3) Canada.
Cedar other than for pencils, pine and fir boards, planks, logs, and cants:											
Quantity.....cubic meters	3,924,576	3,104,027	2,233,169	1,334,765	1,129,555	3,224,258	2,513,283	1,381,499	867,621	732,083	(1) United States.
Value	101,686	80,166	37,736	33,021	30,127	84,245	66,610	25,198	22,904	20,106	(2) Canada.
											(3) Negligible.
Automobiles:											
Quantity.....number	7,873	5,018	1,887	491	896	7,423	4,659	1,683	388	805	(1) United States.
Value	13,777	9,545	3,378	1,864	3,357	12,987	8,921	3,093	1,582	3,075	(2) Negligible.
											(3) Negligible.
Parts of automobiles other than chassis and tires: Value	10,917	16,444	9,734	10,883	27,769	10,826	16,313	9,675	10,706	27,534	(1) United States.
											(2) Negligible.
											(3) Negligible.
Crude oil and heavy oil:											
Quantity.....1,000 gallons	380,655	419,816	453,608	6,130,089	7,439,851	215,032	254,222	264,202	3,367,126	4,903,433	(1) United States.
Value	45,162	46,603	44,063	68,347	82,483	20,548	26,091	24,972	39,784	54,475	(2) Asiatic Russia.
											(3) Netherland India.

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Mineral oil other than crude and heavy: [1]											
Quantity ..... 1,000 gallons	91,795	112,955	189,454	155,189	197,235	52,250	59,495	64,404	73,066	83,085	(1) Netherland India.
Value	44,771	46,323	41,721	40,513	41,544	22,294	24,423	24,104	19,526	17,215	(2) United States.
											(3) Germany.
Sulphate of ammonia, crude:											
Quantity ..... 100 kin	4,741,341	6,344,299	3,735,798	1,807,477	2,681,688	473,602	895,102	62,378	None	3	(1) Germany.
Value	36,303	48,086	15,861	9,421	13,807	3,477	6,434	297	None	(2)	(2) Great Britain.
											(3) Manchuria.
Pulp for papermaking:											
Quantity ..... 100 kin	1,238,321	1,361,347	1,708,762	2,706,373	3,814,656	113,945	244,422	339,845	755,276	1,415,096	(1) United States.
Value	11,454	13,485	11,840	27,066	44,256	1,289	2,317	2,418	7,802	16,321	(2) Norway.
											(3) Canada.
Phosphate:											
Quantity ..... 100 kin	7,888,568	9,317,844	6,866,933	11,728,095	11,375,760	2,702,190	3,622,044	3,512,141	2,443,913	3,152,198	(1) Egypt.
Value	11,977	13,454	7,213	15,374	16,677	3,255	4,234	2,994	2,718	3,999	(2) United States.
											(3) Straits Settlements.
Iron wire rods:											
Quantity ..... 100 kin	2,803,338	2,624,567	1,086,113	646,534	540,266	483,922	430,448	264,599	200,979	291,893	(1) United States.
Value	13,378	13,577	4,219	5,231	4,108	2,704	2,497	1,220	1,826	2,235	(2) Sweden.
											(3) Germany.
Iron plates and sheets, not coated with metals, in thickness less than 0.7 millimeter, other than silicon steel:											
Quantity ..... 100 kin	3,057,784	1,330,591	309,774	24,792	13,946	804,401	204,262	2,478	306	11,738	(1) United States.
Value	27,883	12,067	1,980	309	171	7,622	1,952	19	10	143	(2) Great Britain.
											(3) Negligible.
Iron plates and sheets, tinned:											
Quantity ..... 100 kin	1,201,923	1,359,407	795,818	1,331,868	1,468,025	854,419	868,624	340,155	416,443	855,884	(1) United States.
Value	16,779	19,921	8,490	22,916	25,698	11,983	13,244	3,912	6,923	14,667	(2) Germany.
											(3) Great Britain.
Iron, waste or old:											
Quantity ..... 100 kin	6,120,119	8,274,264	4,926,665	16,882,682	23,549,806	2,844,365	3,602,372	562,215	7,575,333	1,600,054	(1) United States.
Value	13,386	18,345	7,321	38,645	65,730	6,322	8,282	824	16,673	45,564	(2) British India and Ceylon.
											(3) Great Britain.
Lead ingots and slabs:											
Quantity ..... 100 kin	1,035,642	1,009,192	893,125	1,109,973	1,576,119	436,559	310,580	281,641	368,644	591,043	(1) Canada.
Value	14,721	15,063	8,127	11,902	17,903	6,107	4,474	2,511	4,012	6,823	(2) United States.
											(3) British India.
Zinc ingots, slabs, and grains:											
Quantity ..... 100 kin	595,987	451,848	341,555	451,315	442,985	148,146	37,735	19,532	53,033	89,875	(1) Canada.
Value	10,936	8,103	3,094	7,462	7,228	2,814	666	169	825	1,352	(2) Australia.
											(3) United States.
Aluminum ingots, slabs, grains, and other:											
Quantity ..... 100 kin	155,613	205,022	86,907	120,646	169,597	60,037	109,558	10,718	31,444	65,645	(1) United States.
Value	9,359	11,401	3,312	10,233	12,576	3,538	5,952	304	2,178	4,146	(2) Canada.
											(3) Switzerland.

[1] Some of the imports entered in 1928, 1929, and 1931 were reported in 100 kin; these amounts have been converted to 1,000 gallons (100 kin=132,277 pounds; 7½ pounds=1 gallon).

[2] Less than 500.

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TABLE 4.—*Imports into Japan from the United States and from all countries of commodities important in Japan's import trade*—Continued

[Value in thousands of yen; 1 kin = 1.3228 pounds]

Commodity	Imports from— All countries 1928	1929	1931	1933	1934	United States 1928	1929	1931	1933	1934	Principal sources in 1934 based on value
GROUP A. IMPORTS OF WHICH THE UNITED STATES IS A MAJOR SUPPLIER—continued											
Hides and skins (cow and buffalo):											
Quantity.....100 kin..	169,331	229,453	208,596	297,410	367,377	39,307	68,408	74,073	102,833	149,915	(1) United States.
Value.....	8,206	10,592	5,710	11,709	14,345	2,600	3,370	1,949	4,175	6,015	(2) China. (3) Australia.
Rosin:											
Quantity.....100 kin..	351,880	379,730	409,147	368,233	351,273	316,949	351,801	386,937	338,613	314,753	(1) United States.
Value.....	3,691	3,739	2,149	2,994	3,161	3,393	3,494	2,005	2,741	2,854	(2) French Indo-China. (3) Negligible.
Chloride of potash, crude:											
Quantity.....100 kin..	368,311	459,843	474,499	561,785	764,382	229,374	338,997	341,056	270,579	337,728	(1) United States.
Value.....	2,302	3,079	3,286	5,009	5,790	1,485	2,378	2,438	2,681	2,643	(2) Germany. (3) Spain.
Copper ingots and slabs:											
Quantity.....100 kin..	244,405	82,298	2,580	222,119	783,166	208,650	48,773	2,113	214,964	782,176	(1) United States.
Value.....	9,957	3,573	78	7,426	26,171	8,785	2,456	67	7,238	26,138	(2) Negligible. (3) Negligible.
Internal-combustion engines:											
Weighing not more than 250 kilograms:											
Quantity.....100 kin..	69,101	93,292	58,829	16,751	34,162	66,718	88,912	55,616	16,196	33,269	(1) United States.
Value.....	5,526	7,354	4,205	1,826	3,253	5,130	6,630	3,328	1,637	2,980	(2) Great Britain. (3) Switzerland.
Weighing not more than 2,500 kilograms:											
Quantity.....100 kin..	18,875	20,384	14,422	14,546	122,294	15,626	17,260	9,327	37,703	119,562	(1) United States.
Value.....	5,108	5,224	5,486	13,955	17,277	1,738	2,006	1,049	4,461	11,623	(2) Negligible. (3) Negligible.
Metal or woodworking machines:											
Quantity.....100 kin..	38,782	60,938	28,370	87,231	163,125	12,032	19,303	7,258	33,897	74,694	(1) Germany.
Value.....	4,380	5,622	3,069	16,247	21,433	2,283	2,477	1,129	5,726	8,810	(2) United States. (3) Great Britian.

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Sensitized films for cinematographs:											
Quantity 100 kin	3,219	3,316	3,324	2,624	3,211	1,944	2,069	2,167	950	2,272	(1) United States.
Value	2,102	2,206	1,985	3,148	3,339	1,569	1,624	1,407	1,617	2,467	(2) Germany.
											(3) Belgium.
Total group A value	1,065,013	1,084,701	577,778	1,031,118	1,268,300	498,081	519,518	278,132	554,181	696,755	
GROUP B. OTHER IMPORTANT IMPORTS INTO JAPAN											
Worsted yarns:											
Quantity 100 kin	86,621	55,670	69,283	11,291	6,214	64	4	3	None	None	(1) Great Britain.
Value	31,911	18,627	12,129	2,766	1,525	21	1	1	None	None	(2) Germany.
											(3) France.
Woolen cloth, serges of wool weighing not more than 500 grammes per square meter:											
Quantity 1,000 square yards	5,997	3,509	2,042	458	501	2	2	1	(2)	7	(1) Great Britain.
Value	[1] 16,014	9,804	4,900	3,027	2,135	[1] 6	3	2	(2)	3	(2) Germany.
											(3) France.
Cotton yarns:											
Quantity 100 kin	10,992	15,718	346,611	176,904	163,557	37	61	54	None	5	(1) China.
Value	1,562	1,795	15,550	14,477	13,252	8	14	9	None	1	(2) Kwantung.
											(3) Great Britain.
White rice:											
Quantity 100 kin	2,130,717	485,779	82,360	176,057	115,567	110,266	14,997	783	None	None	(1) French Indo-China.
Value	16,959	4,100	423	1,047	661	1,000	134	4	None	None	(2) British India.
											(3) Negligible.
Soybeans:											
Quantity 100 kin	7,800,957	9,462,678	9,152,004	7,243,904	9,128,311	280	None	None	None	None	(1) Manchuria.
Value	49,688	60,091	27,817	38,035	41,028	1	None	None	None	None	(2) Kwantung.
											(3) Negligible.
Sugar, all grades:											
Quantity 100 kin	6,350,922	3,795,281	3,305,275	2,210,124	1,732,188	1,247	1,490	986	143	62	(1) Netherland India.
Value	64,956	31,158	15,601	12,794	9,679	24	24	14	4	1	(2) Philippine Islands.
											(3) Great Britain.
Wheat bran:											
Quantity 100 kin	3,760,325	3,433,415	4,090,425	2,356,037	3,019,833	None	None	None	None	None	(1) China.
Value	14,236	12,384	7,927	6,054	8,885	None	None	None	None	None	(2) Manchuria.
											(3) Kwantung.
Oil cakes, bean:											
Quantity 100 kin	16,359,564	13,863,458	17,211,335	8,993,105	10,767,202	----------	None	None	None	None	(1) Manchuria.
Value	73,362	64,800	38,341	33,635	34,410	----------	None	None	None	None	(2) Kwantung.
											(3) China.
Fodder:											
Quantity 100 kin	1,418,196	2,603,803	4,303,203	6,081,563	8,466,355	54,879	105,282	74,492	730	12,385	(1) Kwantung.
Value	6,741	12,260	11,666	20,761	31,074	263	426	190	7	34	(2) Manchuria.
											(3) Canada.
Fish, salted:											
Quantity 100 kin	343,200	505,057	1,236,079	813,690	972,247	18,395	12,570	4,975	976	57	(1) U. S. S. R. (Asiatic).
Value	3,242	4,912	10,258	10,079	11,480	159	73	29	8	1	(2) Canada.
											(3) Netherland India.

[1] Less than 500.
[2] Alpaca specifically mentioned in 1928.

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TABLE 4.—*Imports into Japan from the United States and from all countries of commodities important in Japan's import trade*—Continued

[Value in thousands of yen; 1 kin=1.3228 pounds]

Commodity	Imports from— All countries 1928	1929	1931	1933	1934	United States 1928	1929	1931	1933	1934	Principal sources in 1934 based on value
GROUP A. IMPORTS OF WHICH THE UNITED STATES IS A MAJOR SUPPLIER—continued											
India rubber and gutta percha, crude:											
Quantity.....100 kin..	434,234	581,512	737,435	1,165,497	1,197,051	1,458	3,319	2,645	1,816	746	(1) Straits Settlements.
Value.....	27,895	33,885	13,183	29,685	57,338	116	213	116	107	39	(2) Netherland India.
											(3) French Indo-China
Jute and manila hemp:											
Quantity.....100 kin..	946,879	1,097,119	1,024,557	1,114,704	1,334,734	None	None	None	None	None	(1) Philippine Islands.
Value.....	17,480	20,055	8,815	13,904	15,094	None	None	None	None	None	(2) British India.
											(3) China.
Coal:											
Quantity.....long ton..	2,734,831	3,203,232	2,650,144	3,440,703	3,996,506	300	None	None	100	4	(1) Manchuria.
Value.....	36,975	42,978	28,268	36,657	47,193	3	None	None	1	(1)	(2) French Indo-China.
											(3) China.
Iron ores:											
Quantity.....100,000 kin..	26,950	32,413	25,832	25,393,763	35,531,933	None	None	310	None	90	(1) Straits Settlements
Value.....	16,173	19,333	12,780	12,840	19,421	None	None	137	None	(2)	(2) China.
											(3) Australia.
Pig iron:											
Quantity.....100 kin..	9,486,913	10,900,920	6,657,465	10,680,855	10,239,965	462,765	507,891	9,003	4,233	12,888	(1) Manchuria.
Value.....	25,254	28,435	11,229	25,252	26,528	1,168	1,277	39	35	84	(2) British India.
											(3) Great Britain.
Spinning machines:											
Quantity.....100 kin..	200,553	277,211	76,249	33,975	54,695	2,531	17,107	5,211	259	575	(1) France.
Value.....	10,431	14,486	3,512	3,520	6,395	350	1,124	190	100	67	(2) Germany.
											(3) Great Britain.
Salt:											
Quantity.....100 kin..	3,787,998	4,776,797	6,175,756	14,787,296	17,941,312	274	2,523	121,053	265,736	381,436	(1) Kwantung.
Value.....	3,732	4,415	4,280	11,709	14,839	----------	7	64	219	309	(2) China.
											(3) Egypt.
Sheep's wool other than carded or combed:											
Quantity.....100 kin..	867,727	809,615	1,429,287	1,805,360	1,372,363	311	None	1	None	296	(1) Australia.
Value.....	108,433	100,673	86,021	164,090	186,382	25	None	----------	(1)	37	(2) New Zealand.
											(3) Argentina.

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Tin ingots and slabs:											
Quantity 100 kin.	67,904	97,617	53,368	58,137	67,572	26	390	24	678	None	(1) Straits Settlements
Value	9,560	9,202	3,527	10,671	15,317	5	62	1	97	None	(2) China. (3) Hong Kong.
Nickel ingots and grains:											
Quantity 100 kin.	17,638	12,327	12,956	53,150	43,667	3,742	2,687	831	617	5,665	(1) Great Britain.
Value	3,744	1,361	1,338	10,905	8,789	294	302	88	151	1,129	(2) Norway. (3) United States.
Total group B value	538,348	494,757	317,565	461,908	551,425	3,443	3,660	884	729	1,705	
Total groups A and B value	1,603,361	1,579,458	895,343	1,493,026	1,819,725	501,524	523,178	279,006	554,910	698,460	
Total imports value	2,196,314	2,216,240	1,235,672	1,917,220	2,282,602	625,536	654,058	342,289	620,789	769,359	

[3] Less than 500.

Source: Annual Return of the Foreign Trade of Japan.

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TABLE 5.—*Exports from Japan to the United States and to all countries of commodities important in Japan's export trade*

[Value in thousands of yen; 1 kin = 1.3228 pounds]

Commodity	Exports to all countries					Exports to United States					Principal markets in 1934 based on value
	1928	1929	1931	1933	1934	1928	1929	1931	1933	1934	
GROUP A. EXPORTS OF WHICH THE UNITED STATES IS AN IMPORTANT DESTINATION											
Raw silk:											
Quantity.....100 kin	547,964	574,849	555,925	483,145	505,999	513,847	555,895	536,664	437,462	433,537	(1) United States.
Value	732,696	781,040	355,391	383,961	286,794	687,464	755,376	342,478	355,841	244,379	(2) France.
											(3) Great Britain.
Pottery: Value	34,642	36,962	19,307	35,634	41,877	13,793	14,500	6,634	10,180	14,314	(1) United States.
											(2) Netherland India.
											(3) British India.
Toys: Value	16,997	13,851	9,819	26,375	30,386	3,666	4,628	2,919	6,976	9,604	(1) United States.
											(2) Great Britain.
											(3) British India.
Crabs in tins: [1]											
Quantity.....100 kin	239,836	191,592	167,039	197,348	159,806	134,641	113,162	93,607	76,367	60,057	(1) Great Britain.
Value	18,573	16,712	12,158	18,619	15,421	10,488	9,821	6,760	7,385	5,757	(2) United States.
											(3) France.
Fish meal:											
Quantity.....100 kin	[2] 3,672	[2] 2,381	[2] 518,983	[2] 872,736	1,998,155	[2] 614	[2] 290	[2] 320,188	[2] 568,814	1,034,856	(1) United States.
Value	[2] 26	[2] 11	[2] 2,606	[2] 5,064	12,125	[2] 7	[2] Negligible	[2] 1,656	[2] 2,965	6,095	(2) Germany.
											(3) Netherlands.
Silk kimonos: Value	1,030	1,310	2,691	8,230	11,046	184	266	638	1,896	3,104	(1) United States.
											(2) British India.
											(3) Ceylon.
Tea:											
Quantity.....00 kin	180,029	178,860	192,093	222,883	240,175	138,265	120,808	122,360	127,661	109,016	(1) United States.
Value	11,847	12,027	8,232	8,450	9,557	9,287	8,124	5,273	5,084	4,629	(2) Union of Soviet Socialist Republics.
											(3) Canada.
Hats, caps, and bonnets of imitation panama:											
Quantity.....dozen	286,545	729,747	1,259,606	1,521,332	1,425,316	58,345	433,881	991,106	810,904	664,960	(1) United States.
Value	3,055	8,727	7,326	7,601	9,280	757	5,340	5,588	3,807	3,765	(2) France.
											(3) Great Britain.
Electric lamps:											
Quantity.....gross	38,375	55,993	1,052,000	1,891,842	1,572,076	20,660	24,743	470,000	734,505	585,907	(1) United States.
Value	4,532	5,399	5,874	10,167	8,942	2,450	2,846	2,911	3,066	2,964	(2) Great Britain.
											(3) Argentina.

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Rags:											
Quantity ..... 100 kin..	729,846	805,863	529,575	664,788	734,669	645,388	696,499	429,196	429,358	408,847	(1) United States.
Value	8,426	9,818	4,963	6,328	8,720	7,222	8,308	3,753	3,525	4,888	(2) Great Britain.
											(3) Kwantung.
Silk fabrics—Habutai.											
Quantity ..... 100 kin..	[3] 18,036	[3] 18,579	6,921	6,632	9,113	[3] 1,792	[3] 1,350	714	1,035	1,085	(1) Great Britain.
Value	[3] 33,039	[3] 30,364	6,552	6,823	8,314	[3] 3,312	[3] 2,423	655	1,134	1,013	(2) British India.
											(3) United States.
Plaits of straw and hemp:											
Quantity ..... 1,000 bundles..	11,567	11,814	6,921	20,719	22,670	2,511	3,058	1,795	8,763	13,535	(1) United States.
Value	4,650	5,136	1,791	7,705	7,991	1,156	1,347	620	3,261	4,921	(2) Great Britain.
											(3) France.
Dried plants for insectifuge:											
Quantity ..... 100 kin..	104,548	83,216	43,845	84,808	93,848	91,559	69,999	31,184	73,425	85,968	(1) United States.
Value	7,487	4,251	1,681	6,350	7,447	6,518	3,504	1,179	5,500	6,791	(2) British India.
											(3) Hong Kong.
Silk fabrics—Pongee:											
Quantity ..... 1,000 square yards..	[3] 23,755	[3] 25,848	25,630	31,075	22,011	[3] 17,442	[3] 20,506	13,117	12,819	10,126	(1) United States.
Value	[3] 12,676	[3] 12,241	7,062	9,668	6,732	[3] 8,980	[3] 9,568	3,399	3,953	3,006	(2) British India.
											(3) Argentina.
Waste cotton and waste cotton yarn:											
Quantity ..... 100 kin..	263,196	281,923	142,632	275,400	366,430	49,483	41,843	21,219	40,710	76,580	(1) Great Britain.
Value	4,757	5,096	1,580	4,113	6,598	808	637	243	395	1,265	(2) Germany.
											(3) United States.
Wood manufactures: Value	3,314	3,592	2,500	3,847	5,611	1,304	1,447	882	952	1,640	(1) United States.
											(2) Kwantung.
											(3) Manchuria.
Colza oil:											
Quantity ..... 100 kin..	76,665	170,886	126,828	109,688	264,048	49,362	88,535	76,992	72,661	205,232	(1) United States.
Value	2,105	4,316	1,963	2,245	5,025	1,378	2,347	1,249	1,487	3,867	(2) Germany.
											(3) Great Britain.
Camphor:											
Quantity ..... 100 kin..	36,607	41,592	22,557	27,604	27,964	17,808	23,658	10,462	9,254	9,881	(1) United States.
Value	5,447	6,199	2,944	4,445	4,603	2,413	3,060	1,348	1,568	1,716	(2) British India.
											(3) France.
Menthol crystals:											
Quantity ..... 100 kin..	3,235	4,638	3,703	5,308	5,097	1,538	2,101	1,905	2,557	3,197	(1) United States.
Value	3,914	5,170	2,984	5,284	4,557	1,836	2,346	1,669	2,692	2,946	(2) France.
											(3) British India.
Silk fabrics—Satins:											
Quantity ..... 1,000 square yards..	[3] 8,014	[3] 12,021	2,593	2,999	7,215	[3] 2,254	[3] 1,598	358	279	183	(1) British India.
Value	[3] 6,214	[3] 8,858	1,394	1,744	4,442	[3] 1,305	[3] 940	141	117	77	(2) Kwantung.
											(3) Australia.
Silk handkerchiefs:											
Quantity ..... 1,000 dozen..	1,503	1,553	854	1,267	2,075	682	748	354	420	414	(1) British India.
Value	5,204	4,448	1,630	2,464	4,308	1,519	1,350	546	579	623	(2) United States.
											(3) Great Britain.

[1] Includes "Crabs in bottles" in 1928, 1929, 1931.
[2] Figures for "Other manures". Fish meal first reported separately in 1934. In 1934 fish meal=98 percent of "Fish meal" and "Other manures."
[3] Includes "artificial silk."

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TABLE 5.—*Exports from Japan to the United States and to all countries of commodities important in Japan's export trade*—Continued

[Value in thousands of yen; 1 kin=1.3228 pounds]

Commodity	Exports to all countries					Exports to United States					Principal markets in 1934 based on value
	1928	1929	1931	1933	1934	1928	1929	1931	1933	1934	
GROUP A. EXPORTS OF WHICH THE UNITED STATES IS AN IMPORTANT DESTINATION—Con.											
Celluloid combs:											
Quantity.....1,000 gross	158	204	156	551	696	6	11	32	171	139	(1) United States.
Value	785	963	763	3,110	4,261	52	105	232	941	1,006	(2) Great Britain.
											(3) British India.
Physical and chemical instruments and parts, including electric batteries: Value	632	510	785	2,122	3,938	3	None	None	121	492	(1) Kwantung.
											(2) United States.
											(3) Netherland India.
Tuna fish in tins: [4]											
Quantity.....100 kin	----------	----------	----------	----------	69,524	----------	----------	----------	----------	55,063	(1) United States.
Value	----------	----------	----------	----------	3,848	----------	----------	----------	----------	3,152	(2) Italy.
											(3) Belgium.
Seeds of perilla ocimoides:											
Quantity.....100 kin	(5)	(5)	46,331	126,638	122,922	(5)	(5)	45,978	126,005	122,387	(1) United States.
Value	(5)	(5)	803	3,532	3,710	(5)	(5)	797	3,517	3,694	(2) Great Britain.
											(3) France.
Antimony manufactures: Value	1,420	1,680	1,389	2,970	3,610	935	1,018	793	1,954	2,410	(1) United States. (2) Great Britain. (3) Australia.
Bristles, pig or hog:											
Quantity.....100 kin	1,035	1,600	1,866	3,431	2,931	992	1,493	1,653	1,938	1,271	(1) United States.
Value	738	1,197	1,053	2,915	3,601	705	1,147	965	1,863	1,756	(2) Great Britain.
											(3) Australia.
Sake:											
Quantity.....Koku	21,057	17,612	13,251	25,284	31,848	None	None	None	496	3,222	(1) Kwantung.
Value	2,919	2,529	1,794	2,902	3,586	None	None	None	77	474	(2) Manchuria.
											(3) United States.
Toothbrushes:											
Quantity.....gross	25,535	31,368	193,000	374,853	404,800	14,778	21,042	92,000	128,137	118,098	(1) United States.
Value	3,221	4,110	1,416	2,951	3,236	1,967	2,938	749	1,073	1,115	(2) Great Britain.
											(3) Italy.
Celluloid manufactures: Value	1,015	1,834	920	2,347	3,223	371	647	271	471	470	(1) Great Britain. (2) United States. (3) Australia.

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Fish oil:											
Quantity ..... 100 kin..	603,350	584,727	257,086	275,161	333,896	44,745	329,049	32,362	4,190	7,455	(1) Germany.
Value	7,941	7,722	1,797	2,307	3,150	725	4,210	155	47	85	(2) Norway.
											(3) Great Britain.
Furs:											
Quantity ..... 100 kin..	5,170	6,792	3,191	5,107	3,927	2,482	4,124	2,783	4,754	3,394	(1) United States.
Value	3,024	3,656	1,633	3,072	3,023	1,844	2,352	1,403	2,820	2,759	(2) Great Britain.
											(3) China.
Matches:											
Quantity ..... 100 kin..	221,889	134,657	75,372	161,774	178,092	97	283	288	95,255	24,509	(1) Hong Kong.
Value	5,117	3,715	1,408	3,249	2,929	2	9	6	1,948	447	(2) United States.
											(3) Straits Settlements.
Lacquered wares: Value	1,713	1,818	1,061	2,371	2,570	458	426	262	1,239	1,344	(1) United States.
											(2) Great Britain.
											(3) France.
Kidney beans:											
Quantity ..... 100 kin..	350,658	612,052	475,378	241,819	405,323	203,211	415,837	142,941	10,939	27,275	(1) Belgium.
Value	4,595	8,518	2,117	1,324	2,534	2,509	5,835	713	71	192	(2) Germany.
											(3) Great Britain.
Rag rugs (Ashibeori and Sagaeori):											
Quantity ..... 1,000 square yards..	4,762	4,474	6,919	12,450	6,099	4,143	3,983	6,829	1,776	5,758	(1) United States.
Value	2,108	1,904	2,039	3,868	2,449	1,840	1,656	2,000	3,660	2,267	(2) Australia.
											(3) Canada.
Artificial manures:											
Quantity ..... 100 kin..	41,382	84,289	180,700	520,567	565,305	None	873	57,966	270,673	232,102	(1) United States.
Value	230	299	596	2,409	2,447	None	9	146	1,237	1,106	(2) Kwantung.
											(3) British India.
Lily bulbs:											
Quantity ..... 1,000 p. c. s..	29,657	27,642	23,987	26,988	31,218	19,139	18,220	15,005	14,996	17,315	(1) United States.
Value	2,534	3,005	1,934	1,900	2,237	1,705	2,039	1,208	1,085	1,320	(2) Great Britain.
											(3) Netherlands.
Fish and shellfish, fresh:											
Quantity ..... 100 kin..	66,420	105,152	126,403	147,903	125,323	34,977	70,469	99,433	44,032	72,461	(1) United States.
Value	1,889	3,284	2,077	1,658	2,191	1,094	2,337	1,545	903	1,390	(2) Kwantung.
											(3) China.
Tablecloths:											
Quantity ..... 100 kin..	4,945	4,669	3,983	8,773	10,788	425	340	416	2,862	3,950	(1) Great Britain.
Value	1,123	970	751	1,857	2,168	101	84	70	681	838	(2) Netherland India.
											(3) Australia.
Flavoring matter in tins and bottles:											
Quantity ..... 100 kin..	6,446	7,768	5,929	17,285	22,471	233	371	308	1,553	3,936	(1) United States.
Value	640	1,068	696	1,059	2,211	137	206	167	281	1,122	(2) China.
											(3) Kwantung.
Grass rugs:											
Quantity ..... 1,000 square yards..	3,955	5,292	2,967	4,358	5,709	3,419	3,263	2,483	3,808	5,100	(1) United States.
Value	1,181	1,687	691	1,077	1,583	968	970	574	928	1,383	(2) Canada.
											(3) Australia.
Glass beads and balls:											
Quantity ..... 100 kin..	9,636	11,966	6,301	19,606	22,771	1,215	783	410	2,926	6,167	(1) United States.
Value	601	774	371	1,180	1,352	63	46	31	254	534	(2) British India.
											(3) Egypt.

[4] Prior to 1934 included with "Other fish in tins", of which sardines and tuna comprise approximately all.

[5] Not available.

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TABLE 5.—*Exports from Japan to the United States and to all countries of commodities important in Japan's export trade*—Continued

[Value in thousands of yen; 1 kin=1.3228 pounds]

Commodity	Exports to all countries					Exports to United States					Principal markets in 1934 based on value
	1928	1929	1931	1933	1934	1928	1929	1931	1933	1934	
GROUP A. EXPORTS OF WHICH THE UNITED STATES IS AN IMPORTANT DESTINATION—con.											
Vegetable wax:											
Quantity.....100 kin..	44,843	49,011	40,240	46,846	52,928	16,192	20,369	17,886	20,538	14,491	(1) United States.
Value.....	2,088	2,255	1,154	1,139	1,258	811	924	520	496	337	(2) Germany.
											(3) France.
Artificial pearl of glass: Value.....	3,244	2,957	1,019	1,349	1,099	1,566	1,638	662	570	384	(1) United States. (2) Great Britain. (3) British India.
Linseed oil cakes:											
Quantity.....100 kin..	(6)	(6)	121,633	203,306	240,772	(6)	(6)	120,247	165,873	214,497	(1) United States.
Value.....	(6)	(6)	396	885	1,008	(6)	(6)	390	729	894	(2) Great Britain. (3) Belgium.
Bamboo:											
Quantity.....100 kin..	86,591	92,929	65,337	98,327	188,390	47,107	45,294	36,492	30,350	54,907	(1) United States.
Value.....	893	1,117	741	701	953	432	520	413	313	445	(2) France. (3) Kwantung.
Paper, gampi and usuyo:											
Quantity.....100 kin..	6,703	6,209	6,160	6,199	11,091	2,813	2,877	3,323	4,049	4,411	(1) United States.
Value.....	768	741	701	867	822	368	388	465	676	346	(2) Great Britain. (3) Germany.
Rugs assorted—Dantsu:											
Quantity.....1,000 sq. yds..	35	18	8	64	191	4	10	7	58	159	(1) United States.
Value.....	64	72	24	324	694	16	51	21	304	644	(2) French Morocco. (3) Manchuria.
Waste silk:											
Quantity.....100 kin..	65,323	53,252	4,638	3,929	8,769	18,055	8,548	1,518	None	36	(1) Italy.
Value.....	9,932	8,370	466	217	647	2,988	1,671	224	None	4	(2) France. (3) Great Britain.
Rapeseed:											
Quantity.....100 kin..	8,111	28,605	9,090	39,735	61,919	7,987	27,500	8,327	37,993	59,514	(1) United States.
Value.....	94	370	58	440	591	92	352	53	423	564	(2) Great Britain. (3) Netherlands.
Oil cake other than bean, linseed, and hempseed:											
Quantity.....100 kin..	(5)	(5)	54,231	65,018	141,600	(5)	(5)	41,962	35,833	109,758	(1) United States.
Value.....	(5)	(5)	157	210	510	(5)	(5)	125	138	421	(2) Norway. (3) Canada.

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Vegetable isinglass:										
Quantity.....100 kin..	21,497	22,039	20,154	21,863	20,931	2,959	3,869	4,086	4,591	3,189
Value.....	4,142	4,649	3,415	3,199	3,215	603	879	723	675	480
Total, group A.....	979,282	1,047,302	494,673	624,658	574,430	788,203	870,635	406,224	451,858	361,249
GROUP B. OTHER IMPORTANT EXPORTS										
Cotton fabrics:										
Other than gray and bleached:										
Quantity.....1,000 square yards..	696,138	846,522	662,306	1,015,219	1,294,964	809	441	335	3,115	3,683
Value.....	201,637	225,105	104,671	211,681	257,853	185	88	39	610	824
Gray:										
Quantity.....1,000 square yards..	607,764	816,090	561,318	611,307	772,502	11	17	103	2,242	1,426
Value.....	123,324	157,937	68,352	93,502	123,580	1	4	15	361	214
Bleached:										
Quantity.....1,000 square yards..	114,910	128,151	190,158	463,712	509,798	309	137	47	2,139	12,211
Value.....	27,240	29,646	25,781	78,033	88,917	54	26	4	327	1,725
Artificial silk tissues, including mixed tissues: Value.	(7)	(7)	39,711	77,382	113,484	(7)	(7)	101	473	282
Silk fabrics (Fuji and crapes):										
Quantity.....1,000 square yards..	68,650	69,796	38,897	61,293	75,220	1,754	1,845	460	346	1,235
Value.....	71,112	69,857	27,321	42,366	53,124	1,776	1,720	319	274	965
Cotton undershirts and drawers—knit:										
Quantity.....1,000 dozen..	8,225	8,855	6,721	10,671	10,111	89	131	141	177	116
Value.....	27,378	29,673	16,505	31,191	31,844	310	486	295	458	263
Wheat flour:										
Quantity.....100 kin..	2,372,329	3,063,378	2,252,011	5,304,249	4,427,373	1	769	None	None	None
Value.....	24,718	26,815	9,517	34,955	28,452	(8)	6	None	None	None
Cycles, parts and accessories, except tires: Value.	2,557	3,429	3,296	12,115	18,904	None	None	None	8	45
Salmon and trout in tins:										
Quantity.....100 kin..	[9] 40,988	[9] 179,799	[9] 179,436	323,851	376,480	[9] 304	[9] 46	[9] 2	115	1,100
Value.....	1,098	4,386	2,697	11,230	18,861	12	1	(8)	3	26

(1) Netherland India. (2) Germany. (3) United States.

(1) Netherland India. (2) Egypt. (3) Manchuria.

(1) British India. (2) Manchuria. (3) Netherland India.

(1) French Morocco. (2) Egypt. (3) China.

(1) British India. (2) Australia. (3) Netherland India.

(1) British India. (2) Great Britain. (3) Australia.

(1) British India. (2) Great Britain. (3) Netherland India.

(1) Kwantung. (2) Manchuria. (3) Philippine Islands.

(1) Netherland India. (2) China. (3) Straits Settlements.

(1) Great Britain. (2) Belgium. (3) Italy.

[6] Not available.
[6] Prior to 1931 "Linseed oil cake" included with "Oilcakes." Linseed oil cake about 28 percent of total in 1931.
[7] Included with "Silk fabrics."
[8] Negligible.
[9] Includes "Salmon in bottles."

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TABLE.—5 *Exports from Japan to the United States and to all countries of commodities important in Japan's export trade*—Continued

[Values in thousands of yen, 1 kin=1.3228 pounds]

Commodity	Exports to all countries					Exports to United States					Principal markets in 1934 based on value
	1928	1929	1931	1933	1934	1928	1929	1931	1933	1934	
GROUP B. OTHER IMPORTANT EXPORTS—con.											
Cotton yarns:											
Quantity.....100 kin..	214,969	202,205	95,177	144,916	194,533	740	1,020	872	206	47	(1) British India.
Value.....	25,893	26,753	8,509	15,712	23,485	42	69	43	19	5	(2) Manchuria.
											(3) Netherland India.
Iron (except ingots, slabs, bars, rods, plates, sheets, wire, wire rope, pipes, and tubes, waste and old):											
Quantity.....100 kin..	6,922	13,705	35,209	1,741,158	[10]1,590,018	None	None	None	None	[10] None	
					[10] 16,192					[10] None	
Value.....	72	126	241	17,176	[10]207,529	None	None	None	None	3,938	(1) Kwantung.
					[10] 3,050					110	(2) British India.
											(3) Palestine.
Boots, shoes, clogs, sandals (other):											
Quantity.....1,000 doz..	(11)	(11)	(11)	(11)	[12] 2,404					[12] 34	(1) Kwantung.
Value.....	3,956	6,787	12,819	19,993	[12] 13,298	172	196	318	730	[12] 192	(2) British India.
											(3) Straits Settlements.
Quantity.....1,000 doz..					[12] 560					85	(1) British India.
Value.....					[12] 2,721					238	(2) Kwantung.
											(3) Manchuria.
Refined sugar:											
Quantity.....100 kin..	3,799,969	3,220,937	2,622,211	2,172,317	2,019,868	None	None	None	None	None	(1) China.
Value.....	38,414	29,974	14,862	14,909	13,532	None	None	None	None	None	(2) Kwantung.
											(3) Manchuria.
Woolen and worsted yarn:											
Quantity.....100 kin..	1,940	2,784	5,237	23,742	44,397	236	222	None	4	6	(1) British India.
Value.....	566	802	861	5,293	12,185	49	59	None	12	13	(2) China.
											(3) Manchuria.
Iron bars and rods:											
Quantity.....100 kin..	124,558	123,026	388,173	752,171	1,803,907	None	None	None	(9)	None	(1) Kwantung.
Value.....	1,111	991	1,788	4,669	11,505	None	None	None	(9)	None	(2) China.
											(3) Manchuria.
Socks and stockings, knit, other than silk:											
Quantity.....1,000 doz..	2,742	2,916	3,263	5,177	6,441	53	45	131	248	580	(1) British India.
Value.....	4,721	5,654	3,541	8,564	11,064	112	117	125	394	900	(2) Great Britain.
											(3) Egypt.
Coal:											
Quantity.....long ton..	2,150,432	2,011,402	1,515,808	1,535,536	1,070,035	13,200	2,005	8,050	None	None	(1) Hong Kong.
Value.....	24,513	23,215	15,008	14,158	10,376	181	30	88	None	None	(2) Straits Settlements.
											(3) China.

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Rice and paddy:											
Quantity.....100 kin..	84,337	77,471	3,171,149	273,699	1,101,085	8,674	8,005	44,425	8,024	11,337	(1) Netherlands.
Value.....	1,276	1,092	15,878	2,124	8,420	158	123	232	86	95	(2) Canada.
											(3) Kwantung.
Copper ingots, slabs, plates, sheets, wire and other:											
Quantity.....100 kin..	49,424	137,594	443,386	141,869	210,360	None	16,943	None	None	None	(1) Kwantung.
Value.....	2,504	7,407	12,007	6,457	8,407	None	872	None	None	None	(2) British India.
											(3) China.
Cement:											
Quantity.....100 kin..	4,929,567	6,423,854	7,428,140	7,904,095	8,998,422	None	1	2	7,833	5,303	(1) Kwantung.
Value.....	6,885	9,182	9,089	7,395	8,038	None	(9)	(9)	11	4	(2) Straits Settlements.
											(3) Hong Kong.
Printing paper:											
Quantity.....100 kin..	827,766	865,077	934,719	620,692	580,135	None	15	68	1,309	152	(1) China.
Value.....	12,938	13,073	11,626	7,642	7,675	None	1	1	23	3	(2) Kwantung.
											(3) Hong Kong.
Woolen fabrics, serges (including cotton mixture): Value.	3,339	4,152	1,394	12,377	29,849	76	23	1	6	9	(1) Kwantung.
											(2) British India.
											(3) China.
Total, group B.....	605,252	676,056	405,474	728,924	914,816	3,128	3,821	1,581	3,795	5,913	
Total, groups A and B.....	1,584,534	1,723,358	900,147	1,353,582	1,489,246	791,331	874,456	407,805	455,653	367,162	
Total exports.....	1,911,766	2,103,719	1,121,580	1,832,315	2,139,195	824,088	912,735	424,130	489,954	394,706	

[9] Negligible.
[10] "Iron rails (including fish plates)" new class in 1934, included with "Other iron" in previous years.
[11] Not reported.
[12] "Sporting shoes of fabric with rubber soles", new class in 1934, included with "Boots, shoes, clogs, sandals, (other)" in previous years.

Source: Annual Return of the Foreign Trade of Japan.

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TABLE 6.—*Domestic exports from the United States to Japan and to all countries of commodities important in United States export trade with Japan*

Commodity	1929			1931			1933			1934		
	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan
Milk and cream, condensed (sweetened):												
Quantity.....pounds..	5,185,786			3,732,403			140			91,197		
Value.....	$983,783	$6,458,838	15.2	$721,340	$3,306,150	21.8	$16	$569,217	(1)	$13,026	$1,014,301	1.3
Milk and cream, evaporated (unsweetened):												
Quantity.....pounds..	2,700,148			3,093,221			292,256			206,578		
Value.....	$249,748	$6,844,208	3.6	$223,616	$4,609,251	4.9	$17,270	$1,939,959	0.9	$12,622	$2,385,351	.5
Cattle hides:												
Quantity.....pounds..	6,799,769			6,210,002			8,897,220			12,738,660		
Value.....	$986,422	$3,516,494	28.1	$497,356	$1,684,659	29.5	$583,881	$1,027,733	56.8	$946,322	$2,490,414	38.0
Calf and kip skins:												
Quantity.....pounds..	[2] 1,311,417			1,842,646			2,970,560			5,307,411		
Value.....	$322,257	$1,539,559	20.9	$212,836	$611,201	34.8	$293,898	$506,216	58.1	$582,460	$1,203,923	48.4
Upper leather, except patent:												
Calf and kip (other than black):												
Quantity.....square feet..	558,513			309,481			34,635			48,748		
Value.....	$209,366	$5,753,074	3.6	$82,451	$1,737,959	4.7	$6,349	$835,006	.8	$9,690	$1,207,161	.8
Goat and kid (glazed kid), black:												
Quantity.....square feet..	632,557			734,220			642,752			479,392		
Value.....	$228,727	$5,288,607	4.3	$192,074	$3,979,588	4.8	$122,010	$2,127,080	5.7	$122,064	$2,315,786	5.2
Sole leather, backs, bends, and sides:												
Quantity.....pounds..	778,405			708,780			27,465			37,745		
Value.....	$330,876	$1,170,248	28.3	$215,881	$607,049	35.6	$13,826	$116,534	11.9	$18,000	$2,049,916	8.8
Sole leather, other, including offal:												
Quantity.....pounds..	1,854,827			221,530						6,000		
Value.....	$388,479	$1,219,637	31.9	$30,097	$667,787	4.5				$305	$363,085	.1
Rice:												
Quantity.....pounds..	12,695,803			511,300								
Value.....	$370,768	$12,129,009	3.1	$8,184	$6,476,953	.1						
Rice flour, meal, and broken rice:												
Quantity.....pounds..	47,643,191			23,978,267			9,165,000					
Value.....	$1,471,266	$1,980,679	74.3	$355,837	$872,552	40.8	$85,197	$108,425	78.6			

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Wheat:												
Quantity ..... bushels..	7,003,493			1,820,016			664,330			4,401,653		
Value	$8,514,619	$111,500,615	7.6	$903,630	$49,771,209	1.8	$352,571	$4,768,524	7.4	$2,351,517	$10,249,369	22.9
Wheat flour:												
Quantity ..... barrels..	276,519			49,040			1,143			4,030		
Value	$1,704,160	$80,791,106	2.1	$150,026	$34,456,252	.4	$4,110	$13,823,462	(1)	$12,309	$16,836,873	.1
Raisins:												
Quantity ..... pounds..	2,990,980			2,219,061			994,529			1,572,179		
Value	$200,989	$8,390,051	2.4	$141,634	$7,925,129	1.8	$48,487	$3,927,673	1.2	$85,105	$4,646,846	1.8
Rubber tire casings, automobile:												
Quantity ..... number..	130,920			80,737			250			5,316		
Value	$1,417,727	$33,479,692	4.2	$1,350,934	$18,093,502	7.5	$1,577	$9,015,543		$26,037	$10,514,404	.2
Other rubber manufactures: Value	$259,498	$3,202,770	8.1	$58,458	$1,612,035	3.6	$16,767	$987,734	1.7	$8,504	$1,232,236	.7
Rosin (gum and wood):												
Quantity ..... 500-lb barrels..	98,553			102,057			105,940			101,136		
Value	$1,402,732	$20,442,390	6.9	$817,987	$8,059,223	10.1	$678,166	$7,863,790	8.6	$825,716	$8,393,508	9.8
Leaf tobacco, bright flue cured:												
Quantity ..... pounds..	13,969,247			11,053,130			6,191,259			9,405,326		
Value	$4,875,129	$116,932,727	4.2	$3,056,020	$88,993,288	3.4	$1,126,253	$67,656,056	1.7	$1,877,504	$109,410,046	1.7
Cornstarch and corn flour:												
Quantity ..... pounds..	18,785,972			10,446,601			142,041			53,238		
Value	$682,788	$8,857,751	7.7	$315,879	$2,787,441	11.3	$2,106	$1,558,203	.1	$1,760	$1,913,778	.1
Raw cotton, except linters:												
Quantity ..... bales..	1,100,837			1,743,653			1,813,845			1,737,101		
Value	$109,399,003	$764,759,978	14.3	$79,740,403	$323,794,364	24.6	$86,699,273	$395,168,038	21.9	$112,178,330	$367,165,106	30.6
Linters, cotton:												
Quantity ..... bales..	3			4,938			10,644			14,256		
Value	$130	$6,070,276	(1)	$102,986	$1,873,031	5.5	$211,651	$3,044,225	7.0	$318,180	$5,590,312	5.7
Other silk manufactures: Value	$69,813	$1,517,291	4.6	$77,032	$903,778	8.5	$270,054	$864,387	31.2	$271,692	$830,855	32.7
Logs and hewn timber:												
Douglas fir:												
Quantity ..... M feet..	22,572			12,468			26,112			25,695		
Value	$259,136	$712,893	36.3	$130,071	$258,284	50.4	$221,739	$414,447	53.5	$244,802	$916,909	26.7
Cedar:												
Quantity ..... M feet..	170,029			113,718			36,112			44,585		
Value	$3,730,858	$3,933,969	94.8	$2,074,298	$2,162,210	95.9	$556,427	$653,660	85.1	$694,692	$772,859	89.9
Hemlock:												
Quantity ..... M feet..	(2)			61,821			53,638			45,460		
Value				$625,141	$637,964	98.0	$474,000	$476,363	99.5	$394,178	$501,441	78.6
Other soft wood:												
Quantity ..... M feet..	70,474			39,613			13,597			19,018		
Value	$848,069	$1,534,213	55.3	$376,564	$448,716	83.9	$104,639	$198,998	52.6	$160,432	$301,180	53.3
Piling:												
Quantity ..... linear feet..	2,424,887			2,240,855			757,423			3,350,570		
Value	$275,582	$1,719,322	16.0	$160,905	$350,752	45.9	$51,783	$261,893	19.8	$279,419	$665,170	42.0
Sawed timber, Douglas fir:												
Quantity ..... M feet..	247,874			207,026			174,191			135,187		
Value	$4,756,394	$10,955,482	43.4	$2,551,428	$3,861,445	66.1	$1,626,704	$2,362,319	68.9	$1,626,976	$2,871,447	56.7

[1] Less than 1/10 of 1 percent.
[2] Calf skins only in 1929.
[3] Not separately classified.

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TABLE 6.—*Domestic exports from the United States to Japan and to all countries of commodities important in United States export trade with Japan*—Continued

Commodity	1929			1931			1933			1934		
	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan
Boards, planks, and scantling:												
Douglas fir:												
Quantity.....M feet	128,047			64,009			26,276			15,206		
Value	$2,358,460	$20,747,945	11.4	$808,268	$7,365,783	11.0	$259,759	$4,814,254	5.4	$188,675	$6,595,339	2.9
Cedar:												
Quantity.....M feet	11,015			4,914			2,159			1,898		
Value	$502,624	$880,536	57.1	$195,412	$439,063	44.5	$53,544	$187,300	28.6	$54,602	$243,711	22.4
Hemlock:												
Quantity.....M feet	93,975			45,217			10,729			8,320		
Value	$1,888,954	$3,358,363	56.2	$719,075	$1,094,285	65.7	$128,827	$180,876	71.2	$118,825	$165,122	72.0
Sulphite wood pulp:												
Quantity.....tons	8,463			21,662			45,017			91,426		
Value	$450,608	$2,116,428	21.3	$1,152,305	$2,251,130	51.2	$1,959,482	$3,048,542	64.3	$5,153,500	$6,815,640	75.6
Petroleum, crude:												
Quantity.....barrels	2,475,853			3,606,243			5,532,965			6,693,211		
Value	$2,910,715	$37,799,683	7.7	$3,517,699	$20,827,852	16.9	$5,504,876	$31,978,625	17.2	$7,944,225	$49,755,937	16.0
Gasoline, naphtha, and other finished light products:												
Quantity.....barrels	912,957			1,256,038			967,390			1,078,591		
Value	$5,037,837	$266,903,923	1.9	$4,184,697	$109,301,417	3.8	$2,128,248	$57,519,861	3.7	$2,650,248	$51,233,428	5.2
Kerosene:												
Quantity.....barrels	1,304,294			370,168			264,965			374,718		
Value	$5,466,382	$83,797,818	6.5	$1,412,909	$34,795,880	4.1	$510,835	$19,209,328	2.7	$809,313	$20,792,450	3.9
Gas and fuel oil:												
Quantity.....barrels	5,171,687			5,436,933			5,181,220			7,917,217		
Value	$4,378,892	$37,199,685	11.8	$4,595,447	$23,966,094	19.2	$4,429,963	$18,309,923	24.2	$7,296,915	$28,342,410	25.7
Lubricating oil:												
Quantity.....barrels	281,935			231,256			162,134			253,696		
Value	$3,299,464	$102,898,977	3.2	$2,545,265	$62,986,230	4.0	$1,379,914	$55,388,864	2.5	$2,017,360	$58,234,385	3.5
Insulating or transformer oils:												
Quantity, gallons in 1929; barrels in 1931, 1933, and 1934	1,654,338			7,567			2,454			3,437		
Value	$579,587	$1,331,944	43.5	$75,317	$502,110	15.0	$22,533	$327,182	6.9	$32,589	$366,362	8.9
Lubricating greases:												
Quantity.....pounds	6,093,618			4,018,792			4,249,981			4,999,441		
Value	$286,385	$6,111,193	4.7	$170,160	$3,541,942	4.8	$171,408	$2,954,157	5.8	$229,312	$3,650,911	6.3

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Paraffine wax:													
Quantity.....pounds..	9,075,376			3,147,332			1,787,668			88,205			
Value.....	$488,783	$14,073,860	3.5	$111,758	$8,424,987	1.3	$56,245	$6,979,090	.8	$6,113	$7,883,085	.1
Petroleum asphalt:													
Quantity.....tons..	15,354			13,083			3,307			3,574			
Value.....	$367,758	$8,542,975	4.3	$257,579	$4,940,611	5.2	$59,380	$2,860,964	2.1	$61,705	$3,383,443	1.8
Electrodes for electric furnaces:													
Quantity.....pounds..	675,705			493,477			1,907,397			2,433,490			
Value.....	$104,129	$2,148,289	4.8	$73,513	$1,427,259	5.2	$228,534	$1,472,746	15.5	$257,052	$1,833,278	14.0
Pig iron:													
Quantity.....tons..	16,930			637			258			1,037			
Value.....	$224,658	$830,225	27.1	$19,761	$150,658	13.1	$8,179	$63,985	12.8	$28,562	$97,050	29.4
Iron and steel scrap:													
Quantity.....tons..	208,260			48,036			547,539			1,168,496			
Value.....	$3,089,698	$7,748,308	39.9	$842,977	$1,957,478	43.1	$4,738,917	$6,874,302	68.9	$12,427,799	$19,187,858	64.8
Steel bars:													
Quantity.....pounds..	51,453,605			824,680			923,851			7,949,880			
Value.....	$713,020	$10,170,297	7.0	$27,068	$2,328,632	1.2	$33,353	$1,131,295	2.9	$143,760	$2,126,320	6.8
Wire rods:													
Quantity.....pounds..	45,660,441			35,284,125			30,864,010			41,038,479			
Value.....	$856,568	$2,012,021	42.6	$547,135	$1,297,110	42.2	$458,163	$608,079	75.3	$546,869	$814,678	67.1
Iron or steel sheets, galvanized:													
Quantity.....pounds..	8,681,389			1,267,950			520,752			90,016			
Value.....	$349,727	$14,759,021	2.4	$37,046	$4,294,442	.9	$13,771	$3,681,783	.4	$3,333	$4,630,247	.1
Steel sheets, black:													
Quantity.....pounds..	56,948,739			5,577,141			1,404,223			7,137,439			
Value.....	$1,933,246	$14,307,338	13.5	$219,319	$6,917,787	3.2	$37,830	$2,464,826	1.5	$222,009	$6,025,326	3.7
Tinplate and terneplate:													
Quantity.....pounds..	138,457,249			40,383,197			53,632,500			90,082,404			
Value.....	$6,987,765	$28,566,189	24.5	$1,610,807	$7,841,193	20.5	$1,924,639	$7,650,419	25.2	$3,628,315	$16,872,564	21.5
Structural shapes, not fabricated:													
Quantity.....tons..	8,346			234			157			376			
Value.....	$342,076	$12,683,746	2.7	$9,761	$3,436,880	.3	$7,191	$535,364	1.3	$14,441	$1,321,587	1.1
Iron and steel rail:													
Quantity.....tons..	13,630			2,897			995			295			
Value.....	$516,014	$5,331,737	9.7	$119,670	$1,288,811	9.3	$39,306	$1,226,929	3.2	$11,727	$2,121,372	.6
Casing and oil-line pipe:													
Quantity.....pounds..	1,656,337			4,343,043			6,343,185			4,562,082			
Value.....	$78,768	$11,861,066	.7	$218,400	$2,468,798	8.8	$303,872	$3,430,620	8.9	$247,961	$5,665,673	4.4
Welded black pipe:													
Quantity.....pounds..	45,243,739			9,661,798			956,453			3,323,512			
Value.....	$1,531,219	$9,275,651	16.5	$305,855	$2,806,151	10.9	$25,169	$1,017,185	2.5	$79,907	$1,621,227	4.9
Welded galvanized pipe:													
Quantity.....pounds..	1,656,337			4,343,043			6,343,185			4,562,082			
Value.....	$78,768	$3,991,720	2.0	$218,400	$2,468,798	8.8	$303,872	$3,430,620	8.9	$247,961	$2,030,996	12.2
Mechanic and other hand tools, not elsewhere specified: Value....	$459,006	$8,808,628	5.2	$154,665	$3,113,042	5.0	$58,852	$1,539,737	3.8	$113,815	$2,469,303	4.6
Chains, sprocket, and other power transmission:													
Quantity.....pounds..	924,708			611,555			226,835			204,983			
Value.....	$303,220	$1,525,442	19.9	$233,328	$686,848	34.0	$63,621	$485,947	13.1	$78,957	$723,185	10.9

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TABLE 6.—*Domestic exports from the United States to Japan and to all countries of commodities important in United States export trade with Japan*—Continued

Commodity	1929			1931			1933			1934		
	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan
Wood screws (of iron and steel):												
Quantity.....gross	3,455,853			2,259,971			57,597			29,750		
Value	$347,528	$774,749	44.9	$249,842	$486,931	51.3	$6,152	$73,282	8.4	$2,987	$49,254	6.1
Other iron and steel manufactures: Value	$633,523	$23,886,410	2.7	$124,810	$5,098,205	2.4	$22,777	$2,653,942	.9	$60,575	$4,790,205	1.3
Aluminum ingots, scrap, and alloy:												
Quantity.....pounds	194,536			1,294,224			5,315,926			7,879,673		
Value	$31,001	$117,345	26.4	$95,500	$132,484	72.1	$515,909	$539,130	95.7	$1,116,071	$1,141,808	97.7
Refined copper, ingots, bars, or other forms:												
Quantity.....pounds	7,953,500			188,000			28,158,249			113,769,412		
Value	$1,596,178	$148,435,789	1.1	$18,484	$38,098,529		$1,589,136	$16,930,654	9.4	$8,266,479	$39,650,904	20.8
Copper, old and scrap:												
Quantity.....pounds	4,128,957			2,502,472			7,399,436			4,827,634		
Value	$633,929	$5,675,750	11.2	$200,302	$5,497,814	3.6	$392,263	$1,646,583	23.8	$322,965	$1,827,252	17.7
Brass and bronze, scrap and old:												
Quantity.....pounds	2,898,683			2,471,856			5,061,133			12,843,978		
Value	$305,835	$5,899,399	5.2	$131,853	$1,519,386	8.7	$205,243	$1,367,759	15.0	$615,897	$3,286,523	18.7
Lead in pigs, bars, etc. (from foreign ore):												
Quantity.....pounds	32,608,618			34,601,681			42,472,198			8,908,393		
Value	$1,583,725	$5,154,370	30.7	$973,368	$1,218,772	79.9	$758,141	$832,984	91.0	$214,811	$304,581	70.5
Other metal manufactures: Value	$279,136	$4,641,479	6.0	$50,078	$1,638,642	3.1	$6,304	$689,979	.9	$15,488	$994,843	1.6
Steam-turbine generator sets:												
Quantity.....number	16											
Value	$259,160	$1,024,178	25.3									
Lightning arresters, choke coils, reactors, and other protective devices:												
Quantity.....number	14,611											
Value	$236,717	$994,681	23.8	$80,209	$606,693	13.2	$75	$309,616		$1,567	$344,988	.5
Other electrical apparatus not elsewhere specified: Value	$512,233	$13,473,611	3.8	$115,586	$4,670,625	2.5	$60,509	$2,287,836	2.6	$48,889	$3,333,281	1.5
Other mining and quarrying machinery: Value	$336,050	$8,752,587	3.8	$62,297	$4,880,824	1.3	$20,036	$2,332,138	.9	$67,461	$3,644,902	1.8

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Turret lathes:												
Quantity.....number..	10			2			76			108		
Value.....	$35,465	$1,405,087	2.5	$6,891	$715,037	1.0	$146,112	$206,241	70.8	$235,402	$567,989	41.4
Other milling machines:												
Quantity.....number..	23			3			68			176		
Value.....	$60,668	$1,558,937	3.9	$5,108	$1,763,400	.3	$170,319	$421,480	40.4	$426,343	$1,280,767	33.3
Gear-cutting machines:												
Quantity.....number..	5			7			97			127		
Value.....	$10,887	$1,330,860	.8	$18,812	$1,603,225	1.2	$110,735	$606,598	18.3	$233,655	$1,422,180	16.4
Other power-driven metal-working machinery, and parts: Value.....	$145,521	$5,790,325	2.5	$38,747	$5,249,987	.7	$51,712	$1,734,850	3.0	$368,006	$2,915,817	12.6
Pneumatic portable tools:												
Quantity.....number..	2,259			245			92			455		
Value.....	$262,456	$2,033,876	12.9	$27,403	$783,463	3.5	$8,130	$281,615	2.9	$38,105	$610,715	6.2
Other textile and textile finishing machinery: Value.....	$419,353	$4,784,434	8.8	$25,299	$1,944,523	1.3	$22,749	$1,317,014	1.7	$60,894	$1,713,041	3.6
Sewing machines for factory or industrial use:												
Quantity.....number..	5,344			6,484			9,870			15,242		
Value.....	$234,680	$4,885,506	4.8	$220,205	$2,739,780	8.0	$177,545	$2,803,732	6.3	$421,206	$4,034,536	10.4
Cigarette and cigar making and other tobacco machinery: Value..	$270,297	$1,296,288	20.9	$756	$1,703,852	.....	$27,891	$398,633	7.0	$125	$405,897	.....
Paper and pulp-mill machinery: Value.....	$293,715	$3,916,936	7.5	$62,124	$1,276,191	4.9	$678	$450,391	.2	$36,473	$707,999	5.2
Air compressors, capacity over 25 cubic feet:												
Quantity.....number..	324			37			6			36		
Value.....	$308,949	$6,317,115	4.9	$50,828	$1,576,597	3.2	$15,465	$837,396	1.8	$47,848	$1,357,167	3.5
Other industrial machinery and parts, not elsewhere specified: Value.....	$1,386,494	$39,804,996	3.5	$592,214	$19,090,116	3.1	$562,756	$6,160,190	9.1	$195,953	$8,958,536	2.2
Cash registers:												
Quantity.....number..	2,357			1,311			982			1,622		
Value.....	$380,397	$9,525,155	4.0	$189,067	$4,062,009	4.6	$84,204	$1,503,499	5.6	$138,131	$2,059,492	6.7
Printing presses:												
Quantity.....number..	42			2			1			7		
Value.....	$355,628	$6,472,435	5.5	$5,650	$2,116,420	.3	$8,100	$1,553,691	.5	$27,916	$2,391,573	1.2
Other printing and typesetting machinery and accessories: Value...	$244,514	$6,818,507	3.6	$72,466	$3,895,135	1.9	$32,778	$2,061,089	1.6	$58,158	$2,812,520	2.1
Motor trucks, busses, and chassis (except electric):												
Quantity.....number..	3,448			4,286			3,903			9,841		
Value.....	$2,226,265	$111,435,125	2.0	$1,661,286	$25,101,159	6.6	$1,238,889	$20,112,818	6.2	$3,139,454	$44,207,307	7.1
Automobile passenger cars and chasis:												
Quantity.....number..	5,408			5,482			3,517			9,645		
Value.....	$3,892,192	$234,291,394	1.7	$2,691,986	$50,007,060	5.4	$1,563,730	$32,100,012	4.9	$4,637,696	$78,258,000	5.9
Automobile parts (except engines)[4] and accessories: Value.....	$12,836,908	$183,108,039	7.0	$4,107,625	$69,214,654	5.9	$2,619,448	$36,954,304	7.1	$5,473,734	$65,789,739	8.3

[4] The classification for 1933 and 1934 is somewhat broader than in other years, but is believed to be entirely comparable.

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TABLE 6.—*Domestic exports from the United States to Japan and to all countries of commodities important in United States export trade with Japan*—Continued

Commodity	1929			1931			1933			1934		
	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan	To Japan	To all countries	Percent of total value to Japan
Aircraft, parts, and accessories: Value	$448,056	$9,125,345	4.9	$153,508	$4,867,687	3.2	$339,208	$9,180,328	3.7	$320,862	$17,602,938	1.8
Motorcycles:												
Quantity—number	1,323			815			469			691		
Value	$292,383	$3,710,851	7.9	$187,915	$1,302,426	14.4	$104,428	$512,594	20.4	$159,671	$811,609	19.7
Other vehicles and parts: Value	$338,941	$3,064,232	11.1	$10,113	$673,689	1.5	$125	$201,531	.1	$3,946	$500,085	.8
Coal-tar colors, dyes, stains, and color lakes:												
Quantity—pounds	1,806,931			1,367,829			551,833			540,382		
Value	$1,055,432	$7,279,086	14.5	$796,938	$4,738,737	16.8	$315,218	$4,652,726	6.8	$392,814	$5,629,666	7.0
Other coal-tar products:												
Quantity—pounds	1,020,658			656,716			5,605,241			1,965,053		
Value	$180,039	$1,382,499	13.0	$83,710	$859,686	9.7	$703,349	$2,360,604	29.8	$353,840	$2,657,010	13.3
Borate (borax):												
Quantity—pounds	9,930,898			16,237,432			22,054,038			23,758,373		
Value	$202,989	$2,934,660	6.9	$316,379	$3,358,609	9.4	$305,383	$2,498,035	12.2	$336,811	$2,907,276	11.6
Soda ash:												
Quantity—pounds	35,037,942			23,449,938			8,615,474			6,945,320		
Value	$548,560	$1,340,544	40.9	$273,505	$857,714	31.9	$64,038	$749,704	8.5	$51,899	$962,458	5.4
Sodium hydroxide:												
Quantity—pounds	45,314,998			38,230,030			3,551,510			2,848,445		
Value	$1,162,048	$3,516,023	33.0	$974,405	$3,464,525	28.1	$64,735	$2,610,986	2.5	$55,821	$2,992,027	1.9
Carbon black:												
Quantity—pounds	5,113,956			6,313,937			9,335,065			3,464,300		
Value	$469,511	$8,270,837	5.7	$327,366	$5,078,838	6.4	$377,497	$5,552,145	6.8	$155,445	$5,541,143	2.8
Other ready-mixed paints:												
Quantity—gallons	124,531			101,823			44,019			105,949		
Value	$201,127	$5,664,990	3.6	$269,536	$3,308,871	8.1	$58,588	$2,147,071	2.7	$145,887	$3,270,817	4.5
Sulphate of ammonia:												
Quantity—tons	60,025			4,983								
Value	$2,523,349	$6,295,519	40.1	$135,050	$2,220,265	6.1						
Other nitrogenous chemical materials:												
Quantity—tons	3,189			2,000			13,320			17,824		
Value	$185,832	$1,229,995	15.1	$52,354	$2,479,379	2.1	$260,160	$2,152,260	12.1	$355,680	$3,798,950	9.4

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Phosphate rock (land pebble):												
Quantity tons	230,548			220,389			157,362			213,620		
Value	$827,316	$4,913,888	16.8	$830,846	$3,663,113	22.7	$485,527	$3,249,225	14.9	$880,824	$4,335,632	20.3
Superphosphate (acid phosphate):												
Quantity tons	6,734			2								
Value	$313,498	$1,489,476	21.0	$227	$940,688	(1)						
Potassic fertilizer material:												
Quantity tons	10,039			23,400			16,918			20,343		
Value	$383,290	$582,690	65.8	$1,046,278	$1,267,109	82.6	$599,982	$901,931	66.5	$752,327	$918,169	81.9
Prepared fertilizer mixtures:												
Quantity tons	11,485			1			2					
Value	$659,387	$1,795,918	36.7	$33	$226,659	(1)	$60	$79,905	.1			
Other fertilizers:												
Quantity tons	22,233											
Value	$1,132,412	$3,660,160	30.9									
Motion-picture films, sensitized, not exposed:												
Quantity linear feet	7,639,799			11,505,093			5,857,454			5,087,793		
Value	$249,129	$1,501,436	16.6	$272,603	$2,322,647	11.7	$104,900	$2,389,376	4.4	$79,742	$2,524,068	3.2
Other sensitized films, not exposed, in rolls or packs:												
Quantity number	612,414			755,666			882,601			1,154,569		
Value	$248,642	$4,817,099	5.2	$122,506	$3,548,635	3.5	$204,598	$2,134,051	9.6	$400,764	$3,192,239	12.6
Dry plate:												
Quantity dozen	437,829			301,970			445,014			114,957		
Value	$236,365	$539,491	43.8	$144,112	$293,382	49.1	$194,357	$320,376	60.7	$70,093	$239,077	29.3
Photographic paper:												
Quantity pounds	414,531			360,444			424,227			327,431		
Value	$422,212	$2,444,941	17.3	$276,724	$1,161,285	23.8	$374,789	$1,069,781	35.0	$235,442	$1,222,766	19.3
Dental instruments and supplies except medicinal: Value	$217,344	$1,475,478	14.7	$121,482	$1,131,505	10.7	$14,342	$1,090,408	1.3	$21,755	$950,105	2.3
Other scientific, laboratory, and professional instruments and apparatus: Value	$319,052	$4,351,935	7.3	$129,403	$2,875,693	4.5	$85,404	$1,314,579	6.5	$69,325	$2,081,245	3.3
Books and pamphlets: Value	$259,180	$13,607,484	1.9	$234,276	$5,642,988	4.2	$74,955	$3,275,414	2.3	$119,145	$3,857,445	3.1
Total above items	$232,518,148	$2,879,083,737	8.1	$138,194,729	$1,207,458,686	11.4	$133,628,466	$947,259,024	14.1	$198,911,874	$1,203,886,754	16.5
Total domestic exports	$258,548,225	$5,157,083,027	5.0	$154,838,793	$2,377,981,786	6.5	$142,920,505	$1,647,220,482	8.7	$209,925,633	$2,100,132,459	10.0

[1] Less than 1/10 of 1 percent.

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APPENDIX C

Table 7 gives statistics of imports of raw silk into the United States from Japan and from other principal sources of supply in the 1924–34 period. In this table an average is used for the years 1924–28, and the years 1929 to 1934, inclusive, are shown separately. Table 8 shows Japan's exports of raw silk in the order used for United States imports in table 7.

TABLE 7.—*General imports of raw silk into the United States from principal sources*

Country of origin or shipment	Average 1924–28	1929	1930	1931	1932	1933	1934 [1]	1933 (January–September)	1934 [1] (January–September)	1935 [1] (January–September)
	Quantity (1,000 pounds)									
Total	66,192	87,068	73,733	83,853	74,053	67,245	56,379	51,747	42,299	48,716
Japan	54,739	69,759	59,918	69,526	69,137	60,213	54,989	45,511	41,166	47,314
China	9,106	14,495	9,874	9,841	2,530	3,769	1,103	3,224	938	1,194
Italy	1,080	2,134	3,711	3,988	2,087	3,067	113	2,880	65	200
France	141	190	85	133	23	6		6		
Hong Kong	715	411	6	6	14		1		1	
All other countries	411	79	139	359	262	190	173	126	129	8
	Value ($1,000)									
Total	374,998	427,126	262,913	191,290	113,882	102,536	71,764	76,169	55,758	64,403
Japan	316,923	356,122	221,468	163,070	106,188	91,659	69,847	66,834	54,210	62,361
China	44,377	59,718	23,942	18,564	3,530	5,874	1,590	4,895	1,314	1,769
Italy	6,449	7,984	11,558	8,497	3,687	4,769	147	4,293	92	261
France	712	1,040	399	343	52	14		14		
Hong Kong	3,849	1,879	20	10	19		3		3	
All other countries	2,688	383	526	806	406	220	177	133	149	12

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	Value per pound									
Japan	$5.79	$5.11	$3.70	$2.35	$1.54	$1.52	$1.27	$1.47	$1.32	$1.32
China	4.87	4.12	2.93	1.89	1.40	1.56	1.44	1.52	1.40	1.48
Italy	5.97	3.74	3.11	2.13	1.77	1.55	1.30	1.49	1.42	1.30
France	5.05	5.47	4.69	2.58	2.26	2.33	----------	2.33	----------	----------
Hong Kong	5.38	4.57	3.33	1.67	1.36	----------	3.00	----------	3.00	----------
All other countries	6.54	4.81	3.78	2.25	1.55	1.27	1.02	1.06	1.16	1.50
	Percent of total quantity									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Japan	82.7	80.1	81.3	82.9	93.4	89.5	97.5	88.0	97.3	97.1
China	13.8	16.7	13.4	11.7	3.4	5.6	2.0	6.2	2.2	2.5
Italy	1.6	2.4	5.0	4.8	2.9	4.6	.2	5.6	.2	.4
France	.2	.2	.1	.2	.0	.0	----------	.0	----------	----------
Hong Kong	1.1	.5	.0	.0	.0	----------	----------	----------	----------	----------
All other countries	.6	.1	.2	.4	.3	.3	.3	.2	.3	0

[1] Imports for consumption.

Source: Foreign Commerce and Navigation of the United States.

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TABLE 8.—*Exports of raw silk from Japan to principal markets*

Country of destination	Average 1924–28	1929	1930	1931	1932	1933	1934	1933 (January-September)	1934 (January-September)	1935 (January-September)
	Quantity (1,000 kin)									
Total	46,474	58,095	47,732	56,058	54,854	48,404	50,691	36,467	37,465	41,193
United States	43,843	56,098	45,352	54,066	51,340	43,762	43,374	34,180	31,501	34,899
France	2,215	1,014	1,169	318	1,215	2,106	3,676	931	2,723	2,983
United Kingdom	166	316	335	924	1,296	1,838	2,290	1,022	1,576	1,772
Australia	97	171	278	281	442	416	552	271	430	303
Canada	105	433	387	383	175	28	76	16	71	12
Italy	9	6	102	14	181	147	160	24	158	16
All other countries	39	57	109	72	205	107	[1] 563	27	[1] 1,006	[1] 1,208
	Value (1,000 yen)									
Total	754,806	784,150	419,104	356,929	382,947	391,189	287,084	301,966	214,380	264,706
United States	713,486	757,975	400,322	343,836	360,285	355,911	244,454	283,679	178,483	225,881
France	34,934	13,466	8,606	2,256	7,165	15,457	21,094	7,258	15,162	19,277
United Kingdom	2,519	4,121	2,912	6,160	9,256	14,654	14,290	8,323	10,068	11,987
Australia	1,516	2,352	2,782	1,928	3,164	3,296	4,017	2,206	3,183	2,257
Canada	1,563	5,750	3,557	2,594	1,174	206	411	131	386	70
Italy	118	56	289	40	1,072	1,025	1,005	177	1,002	130
All other countries	670	430	636	115	831	640	1,813	192	6,096	5,104
	Value per kin in yen									
United States	26.27	13.04	8.83	6.36	7.02	8.13	5.64	8.30	5.67	6.47
France	15.77	13.28	7.36	7.09	5.90	7.34	5.74	7.80	5.57	6.46
United Kingdom	15.17	13.04	8.69	6.67	7.14	7.97	6.24	8.14	6.39	6.76
Australia	15.63	13.75	10.01	6.86	7.16	7.96	7.28	8.14	7.40	7.45
Canada	14.89	13.28	9.19	6.77	6.71	7.36	5.41	8.19	5.44	5.83
Italy	13.11	9.33	2.83	2.86	5.92	6.97	6.28	7.38	6.34	8.13
All other countries	17.18	7.54	5.83	1.60	4.05	5.98	3.22	7.11	6.06	4.23

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	Percent of total quantity									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
United States	94.3	96.6	95.0	96.5	93.6	90.4	85.6	93.7	84.0	84.8
France	4.8	1.8	2.5	.6	2.2	4.4	7.3	2.6	7.3	7.2
United Kingdom	.4	.5	.7	1.7	2.4	3.8	4.5	2.8	4.2	4.3
Australia	.2	.3	.6	.5	.8	.9	1.1	.7	1.2	.8
Canada	.2	.7	.8	.7	.3	.0	.1	.0	.2	.0
Italy	.0	.0	.2	.0	.3	.3	.3	.1	.4	.0
All other countries	.1	.1	.2	.1	.4	.2	1.1	.1	2.7	2.9

[1] Prior to 1934 Japan sold to British India only insignificant quantities of raw silk; during 1934, however, sales totaled about 407,000 kin valued at 1,789,000 yen and about 953,000 kin valued at 3,477,000 yen during the first 9 months of 1935.

Source: Annual Return of the Foreign Trade of Japan and Monthly Return of the Foreign Trade of Japan.

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APPENDIX D

Table 9 gives statistics of raw-cotton exports from the United States to Japan and to other principal markets. Table 10 shows imports of raw cotton into Japan from the United States and other important sources of supply. Tables 9 and 10 cover the years 1924–34. The data for the 1924–28 period are shown as an annual average; for the years 1929 to 1934, inclusive, they are shown separately.

TABLE 9.—*Exports of raw cotton, except linters, from the United States to principal markets*

Country of destination	Average 1924–28	1929	1930	1931	1932	1933	1934	1933 (January–September)	1934 (January–September)	1935 (January–September)
	Quantity (1,000,000 pounds)									
Total	4,308	3,885	3,422	3,603	4,715	4,412	3,029	2,941	2,144	1,644
Japan	574	567	470	914	1,178	950	906	597	552	419
United Kingdom	1,059	795	625	469	780	780	467	528	336	287
Germany	1,033	869	868	718	924	873	391	610	349	138
France	465	431	490	233	436	455	227	278	147	123
Italy	367	405	281	277	372	426	261	296	175	165
Spain	156	146	133	129	176	165	135	114	97	87
China	68	119	165	453	303	162	150	108	135	33
Canada	112	121	100	87	95	111	131	65	91	75
Soviet Union	176	150	41	----	----	33	15	33	15	58
Poland and Danzig	----	----	1	10	60	123	111	79	81	83
All other countries	298	282	248	313	391	334	235	233	166	176
	Value ($1,000,000)									
Total	908	765	494	324	343	395	367	249	251	208
Japan	115	109	66	80	86	87	112	51	66	53
United Kingdom	227	160	92	42	56	70	56	45	39	36
Germany	216	170	123	64	68	77	45	51	39	17

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France	102	86	71	23	33	41	28	24	17	16
Italy	78	80	42	25	27	37	32	25	21	21
Spain	34	29	20	13	13	15	16	9	11	11
China	12	23	21	38	22	14	18	9	16	4
Canada	23	23	14	8	6	10	16	6	11	10
Soviet Union	39	29	7	----	----	3	2	3	2	7
Poland and Danzig	----	----	----	1	4	11	13	7	10	11
All other countries	62	56	38	30	28	30	29	19	19	22
	Percent of total quantity									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Japan	13.3	14.6	13.8	25.4	25.0	21.5	29.9	20.3	25.7	25.5
United Kingdom	24.6	20.5	18.3	13.0	16.6	17.7	15.4	18.0	15.7	17.5
Germany	24.0	22.4	25.4	19.9	19.6	19.8	12.9	20.7	16.3	8.4
France	10.8	11.1	14.3	6.5	9.2	10.3	7.5	9.5	6.9	7.5
Italy	8.5	10.4	8.2	7.7	7.9	9.6	8.6	10.0	8.2	10.0
Spain	3.6	3.8	3.9	3.6	3.7	3.7	4.5	3.9	4.5	5.3
China	1.6	3.0	4.8	12.6	6.4	3.7	4.9	3.7	6.3	2.0
Canada	2.6	3.1	2.9	2.4	2.0	2.5	4.3	2.2	4.2	4.6
Soviet Union	4.1	3.9	1.2	----	----	.8	.5	1.1	.7	3.5
Poland and Danzig	----	----	----	.3	1.3	2.8	3.7	2.7	3.8	5.0
All other countries	6.9	7.2	7.2	8.6	8.3	7.6	7.8	7.9	7.7	10.7

Source: Foreign Commerce and Navigation of the United States.

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TABLE 10.—*Imports of raw cotton into Japan from principal sources*

Country of origin or shipment	Average 1924–28	1929	1930	1931	1932	1933	1934	1933 (January–September)	1934 (January–September)	1935 (January–September)
	Quantity (1,000 kin)									
Total	1,065,329	1,078,957	957,316	1,115,683	1,274,016	1,248,920	1,355,485	967,737	1,058,931	938,055
United States	412,472	448,515	388,349	532,102	910,170	743,488	648,673	507,088	467,016	409,116
British India	523,094	513,647	472,544	480,825	274,105	397,728	579,238	395,277	502,442	452,476
China	92,940	77,864	70,285	71,315	53,159	56,907	33,064	28,905	21,757	12,004
Egypt	19,826	23,357	18,259	28,717	33,036	28,045	54,955	20,364	36,423	41,885
All other countries	16,997	15,574	7,879	2,724	3,546	22,752	39,555	16,103	31,293	22,574
	Value (1,000 yen)									
Total	685,825	573,016	362,046	296,273	447,401	604,847	731,425	460,733	550,122	546,280
United States	294,400	276,357	176,800	153,700	320,752	381,656	400,919	259,080	278,255	267,916
British India	309,728	231,108	147,688	113,262	91,800	168,797	252,435	167,735	217,545	226,375
China	53,023	33,628	21,985	17,366	18,884	24,348	15,693	11,698	10,358	5,867
Egypt	23,043	22,170	12,592	11,619	15,300	19,084	39,787	13,921	25,730	33,745
All other countries	5,631	9,753	2,981	326	665	10,962	22,591	8,299	18,234	10,377
	Value per kin in yen									
United States	0.71	0.62	0.46	0.29	0.35	0.51	0.62	0.51	0.60	0.65
British India	.59	.45	.31	.24	.33	.42	.44	.42	.43	.50
China	.57	.43	.31	.24	.36	.43	.47	.40	.48	.49
Egypt	1.16	.95	.69	.40	.46	.68	.72	.68	.71	.81
All other countries	.33	.63	.38	.12	.19	.48	.57	.52	.58	.46
	Percent of total quantity									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
United States	38.7	41.6	40.6	47.7	71.4	59.5	47.9	52.4	44.1	43.6
British India	49.1	47.6	49.4	43.1	21.5	31.9	42.7	40.9	47.5	48.2
China	8.7	7.2	7.3	6.4	4.2	4.6	2.4	3.0	2.0	1.3
Egypt	1.9	2.2	1.9	2.6	2.6	2.2	4.1	2.1	3.4	4.5
All other countries	1.6	1.4	.8	.2	.3	1.8	2.9	1.6	3.0	2.4

Source: Annual and Monthly Return of the Foreign Trade of Japan.

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PART II

DETAILED ANALYSIS OF UNITED STATES IMPORTS FROM JAPAN IN RECENT YEARS

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PART II. DETAILED ANALYSIS OF UNITED STATES IMPORTS FROM JAPAN IN RECENT YEARS

This part of the report is a detailed analysis of United States imports for consumption from Japan in 1929, 1931, 1932, 1933, and 1934, and in the first 8 months of 1935.

Table 1 shows all classifications of which the imports from Japan were valued at $12,000 or more in 1934, whether or not Japan was the principal supplier of the commodity. The tariff paragraph as noted for each classification is that of the act of 1930. The rate of duty applicable to each classification is shown for each year. In most cases the rates of duty shown for 1929 are those established by the act of 1922; the rates shown for the years 1931–35 are those established by the act of 1930. In some cases, however, the rates of duty shown are those resulting from action taken under the flexible provisions of the Tariff Acts of 1922 and 1930, or the Trade Agreements Act of 1934. Total imports into the United States and those from Japan are presented separately. Comments on each of the commodity classes provide a brief summary of general information pertaining to the effect which the imports from Japan exercise upon imports from other countries and upon domestic production.

Table 2 includes commodities the imports of which from Japan were valued at more than $25,000 in the first 8 months of 1935, but at less than $12,000 in 1934. The arrangement of the details of the trade in these commodities follows that in table 1.

Table 3 shows imports of commodities of which imports from Japan were valued at less than $12,000 in 1934 (other than those shown in table 2) but of which Japan was the principal supplier in 1934 or of which Japan supplied imports valued at $8,000 or more in the first 8 months of 1935. In this table are shown import statistics from all countries for the year 1934, and from Japan for the year 1934 and for the first 8 months of 1935.

Imports from Kwantung Leased Territory (leased to Japan) are shown in table 4. Commodities which appear in this table are those in which imports from Kwantung were valued at $12,000 or more in 1934, or at $8,000 or more during the first 8 months of 1935, and those of which Kwantung was the principal supplier in 1934. Statistics of imports from Kwantung are shown separately because they are segregated in United States statistics of foreign trade.

The first three of these tables cover 99.3 percent of the value of total imports into the United States from Japan in 1934. Table 1 gives data respecting 271 commodities representing 98.7 percent of the value of imports into the United States from Japan in 1934. The total value of these commodities from Japan in that year was $116,391,752, which was 42.6 percent of the total value of $273,011,387 for the same commodities imported from all countries. Seventy-two percent, or $83,863,209 in value, of the 271 commodities imported from Japan were entered free of duty, and 28 percent, or $32,528,543 in value, were subject to duty. Total value of imports and dutiable

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and free imports in 1934, together with the values of imports covered by the three tables, were as follows:

	Total from all countries	From Japan
Total imports into the United States of all commodities in 1934	$1,636,002,791	$117,963,573
Dutiable	644,842,089	33,869,465
Free	991,160,702	84,094,108
Trade of Japan (total tables 1, 2, and 3 of pt. II)	$446,318,278	$117,120,253
Percentage of total imports of all commodities	27.3	99.3
Dutiable	$116,177,136	$33,174,107
Free	330,141,142	83,946,146
Table 1 (total of 271 commodities)	273,011,387	116,391,752
Percentage of total imports of all commodities	16.7	98.7
Dutiable	$102,043,757	$32,528,543
Free	170,967,630	83,863,209
Table 2 (total of 11 commodities)	102,812,308	46,449
Percentage of total imports of all commodities	6.3	(1)
Dutiable	$3,287,987	$35,520
Free	99,524,321	10,929
Table 3 (total of 199 commodities)	70,494,583	682,052
Percentage of total imports of all commodities	4.3	.6
Dutiable	$10,845,392	$610,044
Free	59,649,191	72,008

[1] Less than 1/10 of 1 percent.

NOTE—In tables 1 and 2 dutiable imports in the totals from all countries do not include the following: (1) Imports from Cuba. (2) Imports ordinarily dutiable but free under special provisions: (*a*) From the Philippine Islands and from the Virgin Islands; (*b*) for special purposes.

Data on above imports, whenever found in significant volume, are so indicated in footnotes.

Free imports include data on imports from Cuba, the Philippine Islands, and the Virgin Islands.

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TABLE 1.—*United States imports for consumption of commodities of*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
5	Medicinal and pharmaceutical preparations, n. s. p. f., not containing alcohol.	25 percent	25.0	25.0	1929			$1,153,353	
		do	25.0	25.0	1931			773,549	
		do	25.0	25.0	1932			590,044	
		do	25.0	25.0	1933			611,315	
		do	25.0	25.0	1934			732,247	
		do	25.0	25.0	1935 [1]			399,240	
5	Chemical elements, compounds, mixtures, and salts, n. s. p. f., not containing alcohol.	do	25.0	25.0	1929	Pound	9,546,780	1,058,791	$0.111
		do	25.0	25.0	1931	do	4,673,483	613,114	.131
		do	25.0	25.0	1932	do	4,323,581	561,698	.130
		do	25.0	25.0	1933	do	9,481,638	848,761	.090
		do	25.0	25.0	1934	do	[2]	950,383	
		do	25.0	25.0	1935 [1]	do	[2]	359,200	
23	Non-coal-tar medicinal preparations, other than ethyl chloride, in capsules, pills, tablets, lozenges, troches, ampoules, jubes, or similar forms, including powders.	Not less than 25 percent.	25.0	25.0	1929			914,096	
		do	25.0	25.0	1931			864,409	
		do	25.0	25.0	1932			730,742	
		do	25.0	25.0	1933			624,739	
		do	25.0	25.0	1934			619,144	
		do	25.0	25.0	1935 [1]			406,100	
31	Toilet articles, n. s. p. f. (including pin trays, powder boxes, etc.) of cellulose compounds (except cellulose acetate).	60 percent			1929 [4]				
		do	60.0	60.0	1931			21,635	
		do	60.0	60.0	1932			17,216	
		do	60.0	60.0	1933			24,199	
		do	60.0	60.0	1934			27,411	
		do	60.0	60.0	1935 [1]			28,327	
31	Articles, n. e. s., of cellulose compounds (except cellulose acetate).	do			1929 [4]				
		do	60.0	60.0	1931			126,564	
		do	60.0	60.0	1932			61,274	
		do	60.0	60.0	1933			69,092	
		do	60.0	60.0	1934			141,774	
		do	60.0	60.0	1935 [1]			112,803	
35	Pyrethrum, or insect flowers, advanced in value.	10 percent	10.0	10.0	1929	Pound	23,240	6,524	.281
		do	10.0	10.0	1931	do	15,770	3,056	.194
		do	10.0	10.0	1932	do	35,630	4,842	.136
		do	10.0	10.0	1933	do	60,747	12,147	.200
		do	10.0	10.0	1934	do	150,370	36,502	.243
		do	10.0	10.0	1935 [1]	do	13,290	2,464	.185
41	Agar-agar	25 percent	25.0	25.0	1929	do	502,626	405,728	.807
		do	25.0	25.0	1931	do	469,335	304,466	.649
		do	25.0	25.0	1932	do	468,999	194,963	.416
		do	25.0	25.0	1933	do	629,784	165,627	.263
		do	25.0	25.0	1934	do	465,326	156,304	.336
		do	25.0	25.0	1935 [1]	do	389,991	137,938	.354

[1] 8 months.
[2] Less than 1/10 of 1 percent.
[3] Not reported.
[4] Not separately classified.

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which imports from Japan were valued at more than $12,000 in 1934

Imports for consumption—Continued					
Japan			Proportion from Japan		Comments
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
----------	$31,948	----------	------	2.8	It is believed the bulk of imports from Japan enter through west coast customs districts; it is known they do not enter through New York. No information is available regarding the variety of imports which enter from Japan under this classification. Germany was the principal source of imports in 1934.
----------	97,620	----------	------	12.6	
----------	38,328	----------	------	6.5	
----------	40,793	----------	------	6.7	
----------	39,537	----------	------	5.4	
----------	13,653	----------	------	3.4	
4,202	1,844	$0.439	(1)	.2	Imports from Japan under this classification consisted almost entirely of ajinomoto vegetable powder (a food flavoring extract made of sodium glutamate from wheat) until June 1934, when this product was transferred to par. 1558; a subsequent decision of the customs court in November 1935 returned the product to its former classification under par. 5. Japan supplies over ⅘ of the imports of ajinomoto vegetable powder; small quantities are also imported from China. There is a small domestic production of food flavoring extracts similar to the Japanese product.
52,170	93,870	1.80	1.1	15.3	
65,431	46,348	.708	1.5	8.3	
154,437	93,233	.604	1.6	11.0	
(2)	238,763	----------	------	25.1	
(2)	8,824	----------	------	2.5	
----------	67,415	----------	------	7.4	Imports are entered under this classification only in cases where they are not classifiable at a higher rate of duty under a related tariff paragraph, as provided for in par. 23. It is believed the bulk of imports from Japan enter through west coast customs districts; it is known they do not enter at New York. No information is available regarding the variety of imports from Japan under this classification. France, Switzerland, and Germany were the principal sources of imports in 1934.
----------	76,733	----------	------	8.9	
----------	46,186	----------	------	6.3	
----------	29,821	----------	------	4.8	
----------	37,489	----------	------	6.1	
----------	21,096	----------	------	5.2	
----------	----------	----------	------	------	Imports consist largely of pyroxylin toothbrush containers, minor articles being soap boxes and other similar utility boxes. These articles are reported to be inferior in quality to domestic production, for which no statistics are available.
----------	17,248	----------	------	79.7	
----------	13,867	----------	------	80.5	
----------	23,129	----------	------	95.6	
----------	26,578	----------	------	97.0	
----------	26,246	----------	------	92.7	
----------	----------	----------	------	------	Imports from Japan consist chiefly of cheap celluloid jewelry of a grade considerably inferior to that produced in the United States. Other important sources of imports under this classification are Germany, France, and the United Kingdom.
----------	38,749	----------	------	30.6	
----------	19,427	----------	------	31.7	
----------	37,087	----------	------	53.7	
----------	98,223	----------	------	69.3	
----------	96,693	----------	------	85.7	
22,240	6,365	.286	95.7	97.6	Pyrethrum is obtained from a species of chrysanthemum which grows extensively in Japan. Large quantities of crude pyrethrum are imported (free) for manufacture in the United States of insect powders and sprays. Pyrethrum flowers (crude) are advanced in value by grinding to powder. (See Pyrethrum, crude, par. 1602.)
15,570	3,026	.194	98.7	99.0	
35,630	4,842	.136	100.0	100.0	
60,747	12,147	.200	100.0	100.0	
149,250	36,148	.242	99.3	99.0	
13,290	2,464	.185	100.0	100.0	
494,667	400,133	.809	98.4	98.6	Agar-agar is derived from a species of seaweed indigenous to all shores washed by the Japan stream. It is used extensively as a culture medium in bacteriological work, in pharmaceutical products, and for edible purposes. Japanese agar-agar is furnished in long, firm shreds, while the only domestic production has been in powder or flakes. A number of large firms import agar-agar, processing, packaging, and marketing the product. Domestic primary consumers, using the imported product long before domestic production was undertaken, standardized their packages and packaging equipment for the use of the Japanese product. Imports greatly exceed domestic production.
465,863	302,701	.650	99.3	99.4	
467,154	193,781	.415	99.6	99.4	
627,540	165,283	.263	99.6	99.8	
464,159	155,646	.335	99.7	99.6	
389,991	137,938	.354	100.0	100.0	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
51	Camphor, natural, crude.	1 cent per pound.	2.7	2.7	1929	Pound	4,203,795	$1,579,562	$0.376
		do	3.0	2.8	1931	do	2,003,875	714,137	.356
		do	3.5	3.5	1932	do	1,799,291	512,993	.285
		do	4.8	4.8	1933	do	1,989,288	411,126	.207
		do	4.1	4.1	1934	do	2,662,714	646,023	.243
		do	3.7	3.7	1935[1]	do	963,627	263,457	.273
51	Camphor, natural, refined.	6 cents per pound.	10.9	9.0	1929	do	1,390,475	766,817	.551
		5 cents per pound.	10.0	10.4	1931	do	1,191,497	573,274	.481
		do	14.1	14.1	1932	do	1,047,471	371,825	.355
		do	16.7	16.7	1933	do	1,598,766	478,986	.300
		do	12.5	12.5	1934	do	1,424,912	569,671	.400
		do	12.7	12.7	1935[1]	do	884,277	347,963	.394
51	Menthol	50 cents per pound.	12.0	11.8	1929	do	288,776	1,208,492	4.18
		do	18.5	18.6	1931	do	327,384	883,161	2.70
		do	23.9	24.2	1932	do	349,048	729,278	2.09
		do	24.2	24.2	1933	do	282,912	485,864	2.07
		do	25.0	25.1	1934	do	424,886	848,087	2.00
		do	21.4	21.1	1935[1]	do	174,360	407,436	2.34
52	Sperm oil, crude	10 cents per gallon.	23.8	-----	1929	Gallon	346,621	145,916	.421
		do	29.7	-----	1931	do	327,115	110,010	.336
		do	30.2	-----	1932	do	184,645	61,136	.331
		5 cents per gallon.[5]	21.8	-----	1933	do	520,212	119,527	.230
		do	21.4	22.5	1934	do	505,025	117,897	.233
		do	23.3	27.3	1935[1]	do	241,520	51,822	.215
53	Expressed or extracted oils, n. s. p. f., edible.	20 percent	-----	-----	1929[4]	-----	-----	-----	-----
		do	20.0	20.0	1931	Pound	11,718,697	554,661	.047
		do	20.0	20.0	1932	do	4,505,451	137,616	.031
		do	-----	-----	1933	do	-----	-----	-----
		do	20.0	20.0	1934	do	2,007,668	66,140	.033
		do	20.0	20.0	1935[1]	do	7,406,241	315,842	.043
53	Corn oil, edible	do	-----	-----	1929[4]	-----	-----	-----	-----
		do	-----	-----	1931[4]	-----	-----	-----	-----
		do	-----	-----	1932[4]	-----	-----	-----	-----
		do	20.0	20.0	1933	Pound	9,159,909	318,596	.035
		do	20.0	20.0	1934	do	10,769,150	450,360	.042
		do	20.0	20.0	1935[1]	do	15,038,934	888,859	.059

[1] 8 months.
[2] Less than 1/10 of 1 percent.
[4] Not separately classified.
[5] Rate changed by Presidential proclamation, effective Apr. 1, 1933.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
4,203,795	$1,579,562	$0.376	100.0	100.0	Natural crude camphor is used chiefly in the extensive manufacture of pyroxylin plastics and for this use is interchangeable with synthetic camphor produced in the United States (since 1933) and imported from Germany in large quantities. It is also the source of natural, refined camphor (not produced in the United States), used widely in medicinals. The production of natural, crude camphor is a Japanese Government monopoly. The increased use of plasticizers other than camphor, the trend toward plastics not requiring camphor, and the competition of synthetic camphor, have resulted in a decline in the price and quantity of imports.
1,963,796	700,241	.357	98.0	98.1	
1,799,291	512,993	.285	100.0	100.0	
1,989,288	411,126	.207	100.0	100.0	
2,662,704	646,019	.243	100.0	100.0	
963,627	263,457	.273	100.0	100.0	
1,382,521	764,102	.553	99.4	99.6	Refined natural camphor is used chiefly in medicine and as a moth repellent. It is a monopoly of the Japanese Government. There is no domestic production. Synthetic camphor produced in the United States becomes official in the United States Pharmacopoeia after June 1, 1936, and may then be used in medicine.
1,191,477	573,268	.481	100.0	100.0	
1,044,946	371,014	.355	99.8	99.8	
1,598,758	478,982	.300	100.0	100.0	
1,424,912	569,671	.400	100.0	100.0	
884,257	347,954	.393	100.0	100.0	
236,866	1,005,468	4.24	82.0	83.2	Imports from Japan consist wholly of natural menthol. Only the natural product is used for medicinal purposes, although the revision of the United States Pharmacopoeia, official after June 1, 1936, recognizes synthetic menthol (produced in the United States). Natural menthol is prepared from the Japanese peppermint plant which is well adapted to the soil and climate of Japan but in the United States has been grown commercially only in the San Joaquin Valley of California; attempts to grow it elsewhere having been commercially unsuccessful. Domestic production of natural menthol was 18,200 pounds in 1931 but has declined since and was discontinued in 1935. There is some domestic production of synthetic menthol which is not now used for medicinal purposes.
259,860	697,326	2.68	79.4	79.0	
314,380	650,290	2.07	90.1	89.2	
263,948	545,638	2.07	99.3	93.3	
399,545	797,442	2.00	94.0	94.0	
159,525	377,610	2.37	91.5	92.7	
					Crude sperm oil is used in producting refined sperm oil and spermaceti wax. Refined sperm oil is used in the leather and textile industries and as a lubricant for rapid-moving machinery. Domestic production of crude sperm oil in 1934 was the largest in many years but amounted to only 79,000 gallons, this being inadequate to domestic needs. Canada is the principal source of imports.
120,816	26,822	.222	23.9	22.8	
10,606	1,943	.183	4.4	3.7	
					Imports consist principally of kapok oil from Netherland India and Japan. It is used mostly for edible purposes and is competitive with cottonseed oil and other edible oils. Increased importation in 1935 is due largely to decreased domestic production of lard and cottonseed oil, to the excise taxes placed in 1934 on certain competing oils, and to increased domestic prices.
180	19	.105	(1)	(1)	
327,375	9,465	.029	7.3	6.9	
1,000,600	38,381	.035	54.8	58.0	
3,870,000	176,386	.046	52.3	55.8	
					Corn oil, a byproduct of the cornstarch industry, is used chiefly as a salad oil. The United States is the world's largest producer of corn oil, with an annual production in excess of 100,000,000 pounds. There are several American-owned cornstarch factories abroad, including one in Korea. Increased imports in 1935 are due to the decreased domestic production of edible oils, to the excise taxes placed in 1934 on certain imported competing edible oils (not including corn oil), and to increased prices of edible oils generally. The Netherlands, the United Kingdom, and Germany were more important sources of imports in 1934 than Japan.
1,432,314	36,065	.025	15.6	11.3	
1,646,524	65,372	.040	15.3	14.5	
1,330,155	71,222	.054	8.8	9.0	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
53	Rapeseed (colza) oil, not elsewhere specified.	6 cents per gallon.	9.5	9.8	1929	Gallon..	2,506,854	$1,587,725	$0.633
		....do.....	12.0	13.6	1931	...do.....	241,808	117,401	.486
		....do.....	16.7	17.1	1932	...do.....	140,143	50,285	.359
		....do.....	15.3	15.5	1933	...do.....	118,993	46,712	.393
		....do.....	17.2	16.7	1934	...do.....	240,967	83,913	.348
		....do.....	16.6	17.8	1935[1]	...do.....	1,762,354	637,587	.362
53	Castor oil.....	3 cents pound	25.1	.....	1929	Pound...	135,251	16,151	.119
		....do.....	42.0	43.1	1931	...do.....	211,111	15,078	.071
		....do.....	52.1	.....	1932	...do.....	1,138,240	65,570	.058
		....do.....	67.5	.....	1933	...do.....	1,291,306	57,424	.044
		....do.....	57.0	61.7	1934	...do.....	418,890	22,041	.053
		....do.....	41.3	53.6	1935[1]	...do.....	257,662	18,915	.073
58	Essential and distilled oils, n. s. p. f., not containing alcohol.	25 percent...	25.0	25.0	1929	...do.....	136,941	289,699	2.116
		....do.....	25.0	25.0	1931	...do.....	118,636	189,139	1.594
		....do.....	25.0	25.0	1932	...do.....	159,257	152,288	.956
		....do.....	25.0	25.0	1933	...do.....	255,542	150,604	.589
		....do.....	25.0	25.0	1934	...do.....	393,513	250,509	.637
		....do.....	25.0	25.0	1935[1]	...do.....	207,499	184,836	.891
60	Anethol, citral, geraniol, heliotropin (except from coal-tar), ionone, rhodinol, safrol, terpineol.	45 percent...	45.0	45.0	1929	...do.....	249,436	86,772	.348
		....do.....	45.0	45.0	1931	...do.....	113,449	24,162	.213
		....do.....	45.0	45.0	1932	...do.....	297,604	41,808	.140
		....do.....	45.0	45.0	1933	...do.....	309,941	37,678	.122
		....do.....	45.0	45.0	1934	...do.....	192,944	46,887	.243
		....do.....	45.0	45.0	1935[1]	...do.....	210,589	66,518	.316
61	Cosmetics and toilet preparations, dentifrices, hair tonics, face powders, rouges, paints, pomades, and creams, not containing alcohol.	75 percent...	75.0	75.0	1929	.....	.....	785,103	.....
		....do.....	75.0	75.0	1931	.....	.....	358,628	.....
		....do.....	75.0	75.0	1932	.....	.....	222,694	.....
		....do.....	75.0	75.0	1933	.....	.....	182,149	.....
		....do.....	75.0	75.0	1934	.....	.....	162,692	.....
		....do.....	75.0	75.0	1935[1]	.....	.....	82,995	.....
81	Sodium ferrocyanide (yellow prussiate).	2 cents pound	23.0	.....	1929	Pound..	1,939,502	168,453	.087
		....do.....	23.3	.....	1931	...do.....	1,185,467	101,608	.086
		....do.....	23.0	.....	1932	...do.....	1,353,600	117,773	.087
		....do.....	23.8	25.5	1933	...do.....	611,186	51,297	.084
		....do.....	23.7	25.1	1934	...do.....	1,121,455	94,581	.084
		....do.....	24.9	28.0	1935[1]	...do.....	494,721	39,676	.080
205	Roman, portland, and other hydraulic cement or cement clinker.	(6).....	(7)	.....	1929	Barrel...	[8] 1,236,203	1,673,411	1.35
		6 cents per 100 pounds.	20.3	21.5	1931	...do.....	457,238	507,918	1.11
		....do.....	29.6	35.9	1932	...do.....	462,496	351,033	.76
		....do.....	27.4	24.2	1933	...do.....	471,949	387,991	.82
		....do.....	23.3	21.0	1934	...do.....	261,844	253,775	.97
		4.5 cents per 100 pounds.[9]	18.7	21.4	1935[1]	...do.....	348,053	342,470	.99

[1] 8 months.
[6] Conditionally free, dutiable at the rates imposed by foreign countries on similar American cement.
[7] Great bulk of imports entered free; on imports subject to the contingent rate the duty averaged 12.8 percent ad valorem.
[8] In addition there were imported, free of duty, 474,095 barrels of portland cement clinker, valued at $257,510.
[9] Rate changed by trade agreement between the United States and Belgium effective May 1, 1935.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
1,635,686	$996,632	$0.609	65.2	62.8	Dutiable rapeseed oil is used largely for edible purposes, i. e., lard compounds, etc. The increase in imports during the first 8 months of 1935 is due largely to decreased production and increased prices of domestic edible oils and to the excise tax placed in 1934 on certain edible oils (not including rapeseed oil).
206,405	98,609	.478	85.4	84.0	
123,263	43,178	.350	88.0	85.9	
110,822	42,941	.387	93.1	91.9	
175,287	63,123	.360	72.7	75.2	
1,550,368	521,312	.336	88.0	81.8	
20,000	1,393	.070	9.5	9.2	Castor oil is used as a medicinal and as a lubricant in the textile and leather industries. Domestic production of castor oil, made from beans imported principally from India and Brazil, amounted to 76,059,839 pounds in 1929 and to 42,375,653 pounds in 1934. Imports are negligible in comparison.
295,800	14,383	.049	70.6	65.3	
189,500	10,602	.056	73.5	56.1	
1,546	2,398	1.551	1.1	.8	The oils entering under this classification from Japan are ho oil, artificial sassafras, and abies oil. The first two are derived from camphor oil, the production of which is a Japanese Government monopoly; the last-mentioned is a variety of pine oil. Neither abies oil nor ho oil is produced in the United States. Artificial sassafras is produced by one company from imported camphor oil. In recent years Japan has restricted the exportation of camphor oil and has developed the production of camphor-oil products. Spain, Germany, and France are important sources of other essential oils imported under this classification.
2,560	412	.161	2.2	.2	
42,362	6,692	.158	26.6	4.4	
123,852	16,817	.136	48.5	11.2	
276,283	46,059	.167	70.2	18.4	
98,262	25,433	.259	47.4	13.8	
35,800	7,337	.205	14.4	8.5	Imports from Japan consist almost wholly of safrol, a perfume material derived from camphor oil. The production of camphor oil is a Japanese Government monopoly, and in recent years the exportation of such oil has been restricted, while production of safrol in Japan has been extended. Safrol, previously produced domestically by three companies from imported camphor oil, is now produced by only one company.
39,600	8,261	.209	34.9	34.2	
167,688	15,754	.094	56.3	37.7	
220,447	20,060	.091	71.1	53.2	
175,814	36,435	.208	90.8	77.7	
198,227	62,780	.317	94.2	94.4	
	33,351			4.2	Indications are that most of the imports from Japan consist of oriental types of cosmetics and toilet preparations used chiefly by orientals living in the United States. Imports enter principally at Hawaii and west coast customs districts. Domestic production of cosmetics and toilet preparations exceeded $100,000,000 in 1933 and probably was largely of the types not imported from Japan. France supplies the larger part of imports under this classification.
	33,105			9.2	
	18,518			8.3	
	23,254			12.8	
	19,158			11.8	
	11,345			13.7	
					Sodium ferrocyanide is used in the manufacture of certain blue pigments and blueprint paper, in textile printing, and in photography. Domestic production is large, there being a small export trade, some of which is to Japan. Consumption is about 10,000,000 pounds annually. Imports are supplied chiefly by the Netherlands.
33,669	2,639	.078	5.5	5.1	
178,131	14,207	.080	15.9	15.0	
178,684	12,767	.071	36.1	32.2	
39,665	41,559	1.05	8.7	8.2	Imports from Japan enter largely and are consumed in Hawaii, only negligible quantities reaching the continental United States. (Cement valued at about $2,000 reached the Pacific coast in each of the years 1933 and 1934.) In the last 5 years imports from Japan have supplied about one-tenth of consumption in Hawaii, the remainder being supplied by United States producers on the west coast. Belgium and Denmark were the principal sources of imports in the last 3 years.
34,693	21,818	.63	7.5	6.2	
19,092	17,782	.93	4.0	4.6	
18,901	20,248	1.07	7.2	8.0	
14,039	12,878	.92	4.0	3.8	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
209	Talc, steatite or soapstone, and French chalk, ground, washed, powdered, or pulverized, except toilet preparations.	25 percent	25.0	25.0	1929	Short ton	29,694	$508,843	$17.14
		35 percent	35.0	35.0	1931	do	23,000	372,290	16.19
		do	35.0	35.0	1932	do	19,728	327,459	16.60
		do	35.0	35.0	1933	do	21,784	361,941	16.61
		do	35.0	35.0	1934	do	20,134	390,673	19.40
		do	35.0	35.0	1935[1]	do	13,875	251,515	18.13
210	Rockingham earthenware.	25 percent	25.0		1929	Dozen	34,082	95,428	2.80
		do	25.0		1931	do	25,267	38,228	1.51
		do	25.0		1932	do	37,305	37,941	1.02
		do	25.0	25.0	1933	do	35,051	35,024	1.00
		do	25.0	25.0	1934	do	25,099	24,472	.98
		do	25.0	25.0	1935[1]	do	22,517	18,268	.81
211	Earthenware and stoneware household table and kitchen articles, not decorated.	45 percent	45.0	45.0	1929	do	478,157	284,028	.59
		10 cents per dozen and 45 percent.	64.0	94.2	1931	do	144,796	76,027	.52
		do	78.9	146.8	1932	do	198,139	58,514	.30
		do	72.2	121.9	1933	do	350,164	128,969	.37
		do	70.7	87.3	1934	do	423,654	165,101	.39
		do	66.3	74.9	1935[1]	do	292,876	137,501	.47
212	China and porcelain household table and kitchen articles, not decorated.	50 or 60 percent.	59.8	60.0	1929	do	546,680	297,838	.54
		10 cents per dozen and 60 percent.	84.7	111.0	1931	do	301,781	122,160	.40
		do	108.7	169.8	1932	do	320,950	65,964	.21
		do	115.3	160.4	1933	do	422,219	76,288	.18
		do	98.5	131.1	1934	do	394,722	102,523	.26
		do	85.5	111.3	1935[1]	do	158,401	62,015	.39
211	Earthenware and stoneware household table and kitchen articles, decorated.	50 percent	50.0	50.0	1929	do	4,644,790	4,987,020	1.07
		10 cents per dozen and 50 percent.	60.5	69.4	1931	do	2,291,262	2,183,429	.95
		do	66.8	87.1	1932	do	2,123,039	1,261,624	.59
		do	67.6	82.4	1933	do	2,915,613	1,655,543	.57
		do	65.2	75.6	1934	do	3,518,614	2,314,063	.66
		do	66.5	77.0	1935[1]	do	2,470,507	1,497,455	.61

[1] 8 months.
[2] Less than 1/10 of 1 percent.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
22	$505	$22.95	(2)	(2)	Imports from Japan consist of extremely white talc and are used principally by the cosmetic trade. Domestic production of talc is substantial, total sales for 1934 amounting to 129,564 short tons valued at $1,346,000; a considerable proportion of California talc is sold to manufacturers of less-expensive grades of cosmetics, but little of it is sold east of Chicago, whereas imports, including those from Japan, enter largely at New York and are used in the eastern part of the United States. Talc produced in New York State, which represents a large proportion of domestic production, is not used by the cosmetic trade. Ground talc imported from Japan is made from the crude material obtained from Manchuria. Italy, Canada, and France are the principal sources of imports.
381	6,256	16.42	1.7	1.7	
33	341	10.33	.2	.1	
1,007	13,355	13.26	4.6	3.7	
1,466	20,626	14.07	7.3	5.3	
1,186	15,251	12.86	8.5	6.1	
					Rockingham earthenware consists chiefly of relatively inexpensive articles for household table use. This type of earthenware is covered with an opaque glaze ranging in color from brown to almost black, which distinguishes it from other types. Teapots constitute the bulk of domestic production and imports. Domestic production consists almost wholly of plain teapots, whereas the bulk of imports consists of decorated articles. The United Kingdom is an important source of imports.
1,568	1,294	.83	4.5	3.7	
16,158	12,186	.75	64.4	49.8	
17,450	9,487	.54	77.5	51.9	
29,162	11,657	.40	6.1	4.1	Trade in undecorated earthenware and china, household table and kitchen articles is relatively unimportant compared with that in the decorated types. The undecorated ware constitutes about 20 percent of domestic sales and about 10 percent of imports from Japan. The competition of undecorated ware with domestic production is an incident in the larger situation respecting decorated ware, discussed separately.
17,078	3,470	.20	11.8	4.6	
116,179	11,410	.10	58.6	19.5	
232,060	30,192	.13	66.3	23.4	
345,732	81,800	.24	81.6	49.5	
250,461	83,707	.33	85.5	60.9	
369,426	118,384	.32	67.6	39.7	
215,950	42,371	.20	71.6	34.7	
277,944	25,311	.09	86.6	38.4	
390,327	38,871	.10	92.4	51.0	
358,257	50,414	.14	90.8	49.2	
132,970	25,941	.20	83.9	41.8	
1,509,417	899,515	.60	32.5	18.0	Different kinds of decorated earthenware and china are competitive in varying degree and the 2 classes of articles must therefore be considered together. The bulk of imports from Japan is china, whereas domestic production is almost entirely earthenware. Japan has replaced Germany as the principal source of imports of cheap and medium-priced china. The cheap china is largely inferior grades of short-line tableware, whereas the medium-priced china imported principally from Japan is mainly dinnerware for the most part in sets. Japan has also replaced the United Kingdom as the principal source of imports of earthenware table articles as a whole, but the United Kingdom still supplies the larger portion of United States imports of earthenwar full-line dinnerware. (Comment continued on p. 115.)
1,021,695	526,417	.52	44.6	24.1	
1,121,094	302,262	.27	52.8	24.0	
2,006,874	619,289	.31	68.8	37.4	
2,667,387	1,042,980	.39	75.8	45.1	
1,909,094	708,037	.37	77.3	47.3	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
212	China and porcelain household, table and kitchen articles, decorated.	55 or 70 percent.	68.5	70.0	1929	Dozen	8,208,636	$8,278,951	$1.01
		10 cents per dozen and 70 percent.	84.0	93.7	1931	do	4,385,208	3,141,426	.72
		do	92.1	112.4	1932	do	4,121,499	1,862,485	.45
		do	93.3	107.1	1933	do	5,104,979	2,192,765	.43
		do	88.1	94.2	1934	do	5,303,461	2,934,476	.55
		do	86.7	93.1	1935[1]	do	2,896,261	1,737,714	.60
211	Earthenware and stoneware (other than household table and kitchen articles and sanitary earthenware) including filter tubes, decorated.	50 percent	50.0	50.0	1929	do	1,447,817	2,041,258	1.41
		10 cents dozen and 50 percent.	61.5	67.9	1931	do	1,128,362	983,467	.87
		do	67.0	78.7	1932	do	836,904	491,169	.59
		do	64.9	77.8	1933	do	783,635	525,653	.67
		do	64.8	71.7	1934	do	894,440	602,485	.67
		do	66.9	73.6	1935[1]	do	570,989	338,347	.59

[1] 8 months.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
5,258,042	$3,457,281	$0.66	64.1	41.8	From the point of view of competition of imports with domestic production, 2 classes of products may be distinguished, namely, the cheap products in which the competition from Japanese imports (both earthenware and china) is direct and intense, and medium-priced products in which imports are principally china, where the competition is indirect and in milder form.
3,358,205	1,418,172	.42	76.6	45.1	
3,420,009	806,126	.24	83.0	43.3	
4,513,003	1,215,892	.27	88.4	55.5	
4,844,484	2,004,420	.41	91.4	68.3	The direct competition is chiefly in decorated cups and saucers (not parts of dinner and other sets) in which the share of imports from Japan was slightly less than 40 percent (in quantity) of the United States consumption of such earthenware and china articles during 1933. In the first half of 1934, however (the latest period for which details are available), the share of imports in consumption was about 25 percent. With respect to plates (not parts of sets), the share of Japanese imports in domestic consumption was about 4 percent in 1933 and about 7 percent in the first half of 1934. Such plates represent a large proportion of sales of domestic tableware not parts of sets but a small part of the imports from Japan.
2,552,433	1,104,727	.43	88.1	63.6	
					The indirect competition of imported china with domestic earthenware includes a substantial amount of medium-priced Japanese dinnerware of excellent quality, which is substantially above the price range of ordinary earthenware made in the United States. Some of the Japanese products, however, having less expensive decorations, are more or less competitive in price with domestic dinnerware. For complete earthenware and china dinner sets considered as a whole, the share of imports from Japan in United States consumption of domestic and Japanese sets (based upon the number of pieces and not upon the number of sets) was about 10 percent in 1933 and 15 percent in the first half of 1934. This increase was mainly in sets having a large number of pieces which are not as competitive with domestic sets as those having a smaller number of pieces, such as 32-piece sets.
					Domestic production of kitchenware (semivitrified earthenware type) increased greatly in quantity in 1933 and 1934; the share of imports from Japan in the United States consumption was 88 percent in the first half of 1933, 51 percent in the second half of 1933, and declined to 36 percent in the first half of 1934.
					Recent trade information indicates that the portion of domestic consumption of household table and kitchenware supplied by imports from Japan in the second half of 1934 and the first half of 1935 continued to decline as compared with the year 1933 and the first half of 1934. A comparison of official statistics of production and imports is not adequate for determination of their relationship because of the great variation in types of articles included. The white ware earthenware domestic industry (which is the largest branch) produced in 1929 goods (decorated and not decorated) valued at $32,066,498, in 1932 at $14,324,712, and in 1934 at $18,287,985.
655,950	476,116	.73	45.3	23.3	The bulk of imports consists of earthenware art and decorative articles. There is a large domestic production of articles of this description but statistics are not available. Both domestic production and imports include a wide variety of articles of varying grades and prices. A large proportion of imports from Japan are novelty articles such as figures of animals, and the trade depends to a large degree upon novelty and attractiveness, rather than price. Italy, Germany, and Czechoslovakia are important sources of imports.
803,108	449,193	.56	71.2	45.7	
602,218	209,869	.35	72.0	42.7	
583,686	210,061	.36	74.5	40.0	
769,436	353,873	.46	86.0	58.7	
499,398	211,840	.42	87.5	62.6	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
212	China and porcelain (other than table and kitchen articles and electrical and chemical, china and porcelain), not decorated.	50 or 60 percent.	60.0	60.0	1929	Dozen	1,538,797	$136,691	$0.09
		60 percent	60.0	60.0	1931	do	662,862	60,030	.09
		do	60.0	60.0	1932	do	375,338	32,371	.09
		do	60.0	60.0	1933	do	374,795	38,949	.10
		do	60.0	60.0	1934	do	468,330	50,365	.11
		do	60.0	60.0	1935[1]	do	326,739	38,904	.12
212	China and porcelain (other than table and kitchen articles and electrical and chemical, china and porcelain), decorated.	55 or 70 percent.	69.9	70.0	1929	do	1,636,643	1,096,879	.67
		70 percent	70.0	70.0	1931	do	2,319,017	964,700	.42
		do	70.0	70.0	1932	do	2,077,483	586,651	.28
		do	70.0	70.0	1933	do	2,266,986	628,333	.28
		do	70.0	70.0	1934	do	3,890,625	803,376	.21
		do	70.0	70.0	1935[1]	do	3,706,577	559,764	.15
213	Graphite or plumbago, crude or refined, natural amorphous.	10 percent	10.0	10.0	1929	Short ton.	[10]12,041	189,198	15.71
		do	10.0	10.0	1931	do	6,409	119,345	18.62
		do	10.0	10.0	1932	do	5,275	71,970	13.64
		do	10.0	10.0	1933	do	5,999	90,786	15.13
		do	10.0	10.0	1934	do	10,469	235,592	22.50
		do	10.0	10.0	1935[1]	do	9,397	196,546	20.92
218	Bottles and jars, wholly or in chief value of glass, used or designed to be used as containers of perfume, toilet preparations, etc., produced otherwise than by automatic machine.	Various	[11]3.0 -5.0	[11]3.0 -5.0	1929			1,095,373	
		75 percent	75.0	75.0	1931			388,389	
		do	75.0	75.0	1932			278,532	
		do	75.0	75.0	1933			423,539	
		do	75.0	75.0	1934			494,685	
		do	75.0	75.0	1935[1]			245,598	
218	Table and kitchen articles and utensils of glass, blown or partly blown in the mold or otherwise, n. s. p. f., undecorated, and colored, cut, engraved, etc.	55 percent	55.0	55.0	1929			1,208,974	
		60 percent	60.0	60.0	1931			797,596	
		do	60.0	60.0	1932			404,678	
		do	60.0	60.0	1933			401,507	
		do	60.0	60.0	1934			737,539	
		do	60.0	60.0	1935[1]			400,963	
218	All other glassware blown or partly blown in the mold or otherwise, n. s. p. f. (except Christmas-tree ornaments) and pressed, colored, cut, engraved, etc., glassware.	55 percent	55.0	55.0	1929			2,048,183	
		60 percent	60.0	60.0	1931			770,129	
		do	60.0	60.0	1932			517,983	
		do	60.0	60.0	1933			556,040	
		do	60.0	60.0	1934			741,947	
		do	60.0	60.0	1935[1]			502,604	

[1] 8 months.
[2] Less than 1/10 of 1 percent.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
92,641	$6,716	$0.07	6.0	4.9	Imports are mainly decorative articles and industrial porcelain. In recent years Japan has supplied the larger proportion of the former and Germany and Czechoslovakia have supplied the larger proportion of the latter. A substantial proportion of imports from Japan consists of decorative miniature figures. Domestic production of china decorative articles is negligible.
49,211	5,681	.12	7.4	9.5	
77,708	2,982	.04	20.7	9.2	
210,128	10,982	.05	56.1	28.2	
232,692	16,815	.07	49.7	33.4	
188,133	14,405	.08	57.6	37.0	
497,444	260,754	.52	30.4	23.8	Imports from Japan consist principally of art and decorative articles, ranging from inexpensive articles sold in large amounts in retail chain stores to expensive artistic pieces. A substantial proportion of imports from Japan consists of miniature animal and other figures. Domestic production of china decorative articles is negligible, but there is a substantial domestic production of earthenware decorative articles, i.e., vases, etc. For many years Germany was the principal source of imports, but imports from that country have declined greatly, at the same time that imports from Japan have increased.
1,343,782	320,816	.24	58.0	33.3	
1,428,027	188,241	.13	68.7	32.1	
1,822,730	267,669	.15	80.4	42.6	
3,603,795	586,488	.16	92.6	73.0	
3,577,373	398,101	.11	96.5	71.1	
1,473	24,682	16.76	12.2	13.0	There has been no officially reported domestic production of natural amorphous graphite since 1930. There is a large domestic production of artificial graphite but it is too expensive to be used for the same purposes as the cheaper Mexican and Japanese (from Chosen) graphite. The latter is used principally in pencils and in the manufacture of foundry facings. Ceylon, Canada, and Mexico are the principal sources of 1934 imports of natural, amorphous graphite.
624	7,118	11.41	9.7	6.0	
1,312	10,705	8.16	24.9	14.9	
1,523	8,752	5.75	25.4	9.6	
1,866	14,213	7.62	17.8	6.0	
762	5,633	7.38	8.1	2.9	
----	553	----	----	(2)	Japan is a minor source of imports, France and Czechoslovakia being the principal sources. Imports from France consist largely of man-blown bottles used in the United States for the bottling of perfumes and toilet preparations, whereas imports from Czechoslovakia and Japan are chiefly of the decorative types, being sold unfilled through department, novelty, and chain stores. Most imports from Japan are sold through chain stores. Domestic production of man-blown perfume and toilet preparation bottles was estimated at $750,000 in 1934 and production of machine-blown and machine-pressed bottles of the same class was estimated at $14,000,000. In recent years machine-made bottles have displaced to some extent man-blown bottles. Domestic production consists almost entirely of bottles and jars used for perfumes and toilet preparations, production of decorative types being very small. Bottles imported from Japan are inferior to those imported from Czechoslovakia, both in the quality of glass and in appearance.
----	82	----	----	(2)	
----	6	----	----	(2)	
----	1,997	----	----	0.5	
----	14,146	----	----	2.9	
----	23,817	----	----	9.7	
----	765	----	----	.1	Annual import figures are not exactly comparable because of changes in statistical classifications. Both imports and domestic production consist of a wide variety of table and kitchen articles. Imports consist largely of man-blown ware. Domestic sales of man-blown glass tableware in 1933 are estimated at $5,000,000, and sales in that year of glass tableware blown or partly blown by machine are estimated at $5,500,000. Czechoslovakia is the principal source of imports; prior to 1935 imports from Germany were considerably larger than those from Japan.
----	2,797	----	----	.4	
----	1,371	----	----	.3	
----	6,048	----	----	1.5	
----	62,645	----	----	8.5	
----	59,097	----	----	14.7	
----	19,327	----	----	.9	Due to changes in statistical classifications, annual import figures are not exactly comparable. This classification includes a great variety of articles. Imports from Japan include articles not usually manufactured in the United States, such as animal figures, and a great variety of novelty articles, as well as articles such as bowls and vases of the general type produced in the United States. Domestic production consists to a large extent of pressed glass tableware, and, in addition, articles such as bowls, vases, candle-sticks, and cooking and baking ware. Germany is the principal source of imports as a whole.
----	27,636	----	----	3.6	
----	32,028	----	----	6.2	
----	50,329	----	----	9.1	
----	168,259	----	----	22.7	
----	123,331	----	----	24.5	

[10] Probably includes some artificial amorphous graphite from Canada.
[11] Approximate ad valorem equivalent of the specific rate.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
225	Spectacles, eyeglasses, goggles, frames, mountings, and parts of cellulose compounds (celluloid, etc.) valued at not over 65 cents per dozen.	20 cents per dozen and 15 percent.	52.7	46.4	1929	Dozen	3,524	$1,868	$0.530
		do	61.7	81.7	1931	do	416	178	.428
		do	76.5	76.5	1932	do	1,018	331	.325
		do	70.5	70.5	1933	do	35,446	12,774	.360
		do	70.3	70.3	1934	do	220,345	79,642	.361
		do	69.6	69.6	1935[1]	do	198,313	72,604	.366
228	Tripod, magnifiers, reading glasses, and engravers' loupes.	45 percent	45.0	45.0	1929[4]				
		do	45.0	45.0	1931	Number	334,608	44,479	.133
		do	45.0	45.0	1932	do	237,641	21,900	.092
		do	45.0	45.0	1933	do	704,085	49,215	.070
		do	45.0	45.0	1934	do	1,545,006	134,174	.087
		do	45.0	45.0	1935[1]	do	1,061,434	48,139	.045
228	Optical instruments, frames, mountings, and parts, n. s. p. f.	do	45.0	45.0	1929[4]				
		do	45.0	45.0	1931			265,450	
		do	45.0	45.0	1932			262,211	
		do	45.0	45.0	1933			165,624	
		do	45.0	45.0	1934			289,433	
		do	45.0	45.0	1935[1]			208,550	
229	Electric lamps, incandescent, metal filaments: Miniature.	20 percent	20.0	20.0	1929	Number	3,389,753	85,468	.025
		do	20.0	20.0	1931	do	48,178,655	675,056	.014
		do	20.0	20.0	1932	do	80,721,604	533,478	.007
		do	20.0	20.0	1933	do	97,274,239	464,874	.005
		do	20.0	20.0	1934	do	67,245,352	352,391	.005
		do	20.0	20.0	1935[1]	do	31,727,986	186,136	.006
229	Electric lamps, incandescent, metal filament: Other than miniature.	do	20.0	20.0	1929	do	947,074	41,304	.044
		do	20.0	20.0	1931	do	21,191,460	696,857	.033
		do	20.0	20.0	1932	do	32,787,817	627,419	.019
		do	20.0	20.0	1933	do	19,342,901	299,469	.015
		do	20.0	20.0	1934	do	25,594,580	485,683	.019
		do	20.0	20.0	1935[1]	do	16,841,853	295,996	.018

[1] 8 months.
[3] Less than 1/10 of 1 percent.
[4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
11	$7	$0.636	.3	.4	Imports consist of finished sun glasses and are of the cheapest grade sold in the United States, retailing for not more than 20 cents each. There are 21 domestic producers; domestic production amounted to 128,489 gross from July 1, 1933, to June 30, 1934. Imports during 1934 amounted to 18,379 gross. During the first 6 months of 1933, 55 percent of production was made to retail at not more than 20 cents each. During the same period in 1934, production was 56.5 percent larger than in 1933, but only 41 percent were made to retail for 20 cents each or less, the trend in domestic production being toward higher-grade goods.
20	6	.300	4.8	3.4	
1,018	331	.325	100.0	100.0	
35,146	12,665	.360	99.2	99.1	
220,345	79,642	.361	100.0	100.0	
198,313	72,604	.366	100.0	100.0	
480	94	.196	.1	.2	Articles in this category are known as magnifiers rather than as microscopes. They are largely inexpensive, nonscientific magnifiers for popular use. Prior to 1933, Germany was the principal source of imports, but in recent years imports from Germany have declined and imports from Japan have increased. Domestic production of optical goods is very large but the bulk of the industry produces only high-grade instruments; inexpensive magnifiers are produced by only a few companies which manufacture other products as well. NOTE.—Indications are that a considerable part of imports recorded as "optical instruments, n. s. p. f." (see below) are misclassified, belonging in this classification.
7,450	215	.029	3.1	1.0	
459,938	19,576	.043	65.3	39.8	
1,435,838	113,530	.079	92.9	84.6	
912,629	40,478	.044	86.0	84.1	
----------	132	----------	------	(2)	Germany is the principal source of imports under this classification. Imports from Japan consist largely of misclassified items which should be shown under statistical classifications: Magnifiers, microscopes valued at less than $1 each, opera and field glasses, and mirrors for telescopes, etc., and in addition lesser amounts of parts for items imported under paragraph 228 (*b*). Total domestic production of optical goods amounted to about $12,000,000 in 1929 and $6,000,000 in 1931; the bulk of such production is of high priced goods for scientific use, whereas imports from Japan are for popular use.
----------	177	----------	------	(2)	
----------	6,815	----------	------	4.1	
----------	55,834	----------	------	19.3	
----------	29,618	----------	------	14.2	
3,240,442	81,125	.025	95.6	94.9	Imports consist principally of Christmas-tree lamps and toy and flashlight lamps. Imports of automobile lamps are negligible. Increased imports since 1929 are due to a considerable extent to the expiration of domestic tungsten filament patents. Only 2 domestic manufacturers produce Christmas-tree lamps but these 2 and several others produce automotive, toy, and flashlight lamps. In 1931, 95,263,000 automobile lamps valued at $7,944,000 and 70,459,000 other miniature lamps valued at $2,913,000 were produced domestically; in 1933, 65,000,000 automobile lamps valued at $4,005,221, and an unknown number of other miniature lamps valued at $2,392,864. It is probable that in some recent years imports of Christmas-tree lamps and of toy lamps have equalled or exceeded domestic production. Imports, in general, are inferior in quality to the bulk of domestic production and lower in price.
47,517,705	659,956	.014	98.6	97.8	
80,411,916	529,126	.007	99.6	99.2	
97,274,239	464,874	.005	100.0	100.0	
67,220,172	352,209	.005	99.9	99.9	
31,720,486	186,065	.006	99.9	99.9	
868,359	37,558	.043	91.7	90.9	The large increase in imports since 1929 is due, to a considerable extent, to the expiration of domestic tungsten filament patents. Domestic production of metal filament lamps other than miniature amounted to about 303,000,000 in 1933, valued at about $41,000,000. About 90 percent of domestic production is produced by 1 large company and 6 others operating under its patents; producing methods are highly mechanized. In 1934, 3,764,856 lamps other than miniature, valued at $669,397, were exported. Imports retail at prices lower than, and are inferior in quality to, the bulk of domestic production. Prices of domestic lamps have been reduced since 1932.
20,807,907	676,715	.033	98.2	97.1	
32,393,141	614,032	.019	98.8	97.9	
19,234,649	295,737	.015	99.4	98.8	
25,501,225	479,383	.019	99.6	98.7	
16,837,116	295,111	.018	99.9	99.7	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
230	Glass mirrors, n. s. p. f. not exceeding 144 square inches in size, with or without frames or cases.	50 percent	50.0	50.0	1929	----------	----------	$303,079	-------
		---do---	50 0	50.0	1931	----------	----------	150,429	-------
		---do---	50.0	50.0	1932	----------	----------	141,998	-------
		---do---	50.0	50.0	1933	----------	----------	146,492	-------
		---do---	50.0	50.0	1934	----------	----------	103,597	-------
		---do---	50.0	50.0	1935[1]	----------	----------	94,876	-------
327	Malleable-iron castings, n. s. p. f.	20 percent	20.0	20.0	1929	Pound	817,891	95,437	$0.117
		---do---	20.0	20.0	1931	---do---	779,683	78,977	.101
		---do---	20.0	20.0	1932	---do---	507,026	48,552	.096
		---do---	20.0	20.0	1933	---do---	1,327,112	118,697	.089
		---do---	20.0	20.0	1934	---do---	1,215,641	116,579	.096
		---do---	20.0	20.0	1935[1]	---do---	[12] 436,753	[12] 53,784	.123
339	Table household kitchen, and hospital utensils, and hollow or flat ware, n. s. p. f. composed of base metal, not elsewhere specified.	40 percent	------	------	1929[4]	----------	----------	----------	-------
		---do---	40.0	40.0	1931	----------	----------	167,663	-------
		---do---	40.0	40.0	1932	----------	----------	273,779	-------
		---do---	40.0	40.0	1933	----------	----------	374,425	-------
		---do---	40.0	40.0	1934	----------	----------	395,200	-------
		---do---	40.0	40.0	1935[1]	----------	----------	230,529	-------
339	Silver-plated table household, kitchen, and hospital utensils, and hollow or flat ware, n. s. p. f.	40 percent	40.0	40.0	1929	----------	----------	144,783	-------
		50 percent	50.0	50.0	1931	----------	----------	233,818	-------
		---do---	50.0	50.0	1932	----------	----------	202,655	-------
		---do---	50.0	50.0	1933	----------	----------	433,339	-------
		---do---	50.0	50.0	1934	----------	----------	720,004	-------
		---do---	50.0	50.0	1935[1]	----------	----------	404,070	-------

[1] 8 months.
[2] Less than 1/10 of 1 percent.
[4] Not separately classified.
[12] Not including malleable cast-iron pipe fittings, advanced, dutiable at 45 percent ad valorem (101,651 pounds valued at $4,601).

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
----------	$2,871	----------	------	.9	Imports (as well as domestic production by the small-glass-mirror manufacturing industry as distinguished from the much larger mirror industry producing plate-glass mirrors for the furniture and building trades) consist largely of inexpensive, framed, single or double faced types of novelty, photo, vanity case, and pocket mirrors, either sold retail as such or used by leather manufacturers as equipment for handbags, etc. Prior to 1934, imports were principally from Germany, but in 1934 and 1935 (8 months) imports from that country have declined drastically and imports from Japan have increased greatly. Domestic production by the small-mirror industry is estimated at $2,000,000 annually in recent years; imports in 1934, therefore, supplied around 5 percent of consumption.
----------	2,431	----------	------	1.6	
----------	2,608	----------	------	1.8	
----------	9,210	----------	------	6.3	
----------	55,439	----------	------	53.5	
----------	70,961	----------	------	74.8	
3,338	313	$0.094	.4	.3	Trade reports indicate that practically all imports from Japan under this classification have consisted of malleable-iron pipe fittings. Late in 1934 the Treasury Department ruled that these fittings should be classified under paragraph 397 at the rate of 45 percent ad valorem, inasmuch as they had been advanced by threading. The practical disappearance of imports from Japan under this classification in 1935 is due to this transfer. Imports from Japan of threaded malleable cast-iron pipe fittings under paragraph 397 were valued at only $3,863 during the first 8 months of 1935. The United Kingdom is the principal source of imports under paragraph 327. Domestic production of malleable-iron castings is known to be large and imports negligible in comparison.
36,873	3,282	.089	4.7	4.2	
20,093	1,827	.091	4.0	3.8	
647,519	41,969	.065	48.8	35.4	
535,346	31,206	.058	44.0	26.8	
500	32	.064	.1	(2)	
----------	----------	----------	------	----------	
----------	12,212	----------	------	7.3	This classification includes table household, etc., hollow and flat ware (not including cutlery) of base metals other than brass, copper, iron and steel, and tin. Imports from Japan consist largely of cheap antimony products such as trays, coaster sets, cups, salts and peppers, animal figures, compotes, etc. In addition, there are smaller imports of similar novelty articles in bronze and pewter. There is a very large domestic production of such articles in comparison with which imports, many of them of distinctive oriental design and therefore noncompetitive, are very small. The United Kingdom and Germany are important sources.
----------	7,704	----------	------	2.8	
----------	32,245	----------	------	8.6	
----------	110,005	----------	------	27.8	
----------	83,140	----------	------	36.1	
----------	8,584	----------	------	5.9	Imports under this classification include a variety of "hollow ware"; i. e., dishes, bowls, trays, candlesticks, etc. (Silver-plated cutlery is dutiable under paragraph 355.) Imports from Japan consist of extremely cheap ware made of molded antimonial lead (instead of more durable nickel, copper, or Britannia metal) thinly coated with silver and lacquered. Such ware is less durable and sells in a much lower price range than the cheapest domestic products or imports from Great Britain. Reduced purchasing power was an important factor in its increased use. Total imports in 1934 were equal in value to about 13 percent of estimated domestic production, which was $11,644,000 in 1929; $3,610,000 in 1932 (estimated); and $5,356,000 (estimated) in 1934. Increased imports in recent years may be due in part to the inclusion in this classification of many of the articles formerly classified as "articles or wares plated with silver, n. s. p. f."—par. 397.
----------	26,111	----------	------	11.2	
----------	46,691	----------	------	23.0	
----------	202,010	----------	------	46.6	
----------	402,389	----------	------	55.9	
----------	203,740	----------	------	50.4	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
353	Electrical goods and parts, n. s. p. f.	30 or 40 percent.	35.5	34.0	1929			$1,086,500	
		35 percent	35.0	35.0	1931			561,637	
		do	35.0	35.0	1932			383,865	
		do	35.0	35.0	1933			440,348	
		do	35.0	35.0	1934			668,839	
		do.[12]	35.0	35.0	1935[1]			466,776	
359	Hypodermic syringes for surgical use, in part of metal, but chief value of glass.	65 percent			1929[4]				
		70 percent	70.0	70.0	1931			31,680	
		do	70.0	70.0	1932			34,866	
		do	70.0	70.0	1933			37,850	
		do	70.0	70.0	1934			40,363	
		do	70.0	70.0	1935[1]			30,449	
371	Bicycles and parts except tires.	30 percent [14]	33.0		1929			28,816	
		do.[14]	35.8	30.0	1931			49,229	
		do.[14]	35.5	30.0	1932			38,756	
		do.[14]	39.6	35.5	1933			70,270	
		do.[14]	32.6	31.9	1934			121,674	
		do	30.0	30.0	1935[1]			121,462	
372	Parts for sewing machines (machines valued not over $75).	15 percent	15.0	15.0	1929			65,034	
		do	15.0	15.0	1931			56,002	
		do	15.0	15.0	1932			37,964	
		do	15.0	15.0	1933			54,822	
		do	15.0	15.0	1934			50,414	
		do	15.0	15.0	1935[1]			17,167	
372	Machinery and parts, n. s. p. f., except agricultural.	30 percent	30.0	30.0	1929			10,507,613	
		27½ percent	27.5	27.5	1931			3,667,198	
		do	27.5	27.5	1932			1,860,857	
		do	27.5	27.5	1933			2,040,428	
		do	27.5	27.5	1934			3,113,954	
		do.[13]	27.5	27.5	1935[1]			1,588,341	
397	Miscellaneous metal articles or wares, n. s. p. f., partly or wholly manufactured, not plated with platinum, gold, or silver, or colored with gold lacquers.[16]	40 percent			1929[4]				
		45 percent	45.0	45.0	1931			2,930,061	
		do	45.0	45.0	1932			1,722,976	
		do	45.0	45.0	1933			1,521,475	
		do	45.0	45.0	1934			1,495,319	
		do	45.0	45.0	1935[1]			1,001,505	

[1] 8 months.
[2] Less than 1/10 of 1 percent.
[4] Not separately classified.
[13] By the trade agreement between the United States and Sweden, effective Aug. 5, 1935, 3 new classes were set up for electric vacuum cleaners and calculating machines and parts on which the duty was reduced to 25 percent ad valorem.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					
Japan			Proportion from Japan		Comments
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
	$3,661			0.3	An analysis of imports indicates the bulk of imports from Japan under this classification consists of flashlight cases without lamps or batteries. From incomplete data imports of these cases from Japan in 1934 are estimated at about 600,000, and domestic production at about 6,000,000. Imports of cases alone were estimated to be valued at about $24,000 in 1934 and domestic production at about $2,171,000, indicating the imported merchandise to be considerably inferior in quality and cheap in price. The classification as a whole includes a wide variety of articles, of which Germany was the principal source of imports in 1934, the United Kingdom ranking second.
	1,522			.3	
	2,900			.8	
	22,198			5.0	
	27,273			4.1	
	27,153			5.8	
	7,773			24.5	Imports are reported to be inferior in quality and price to domestic production. There are three small domestic producers, but statistics regarding their production are not available. Germany was formerly the principal source of imports, but since 1933 imports from Germany have declined drastically, and imports have been predominantly from Japan. Imports probably supply a substantial portion of domestic consumption.
	15,167			43.5	
	17,661			46.7	
	36,709			90.9	
	28,253			92.8	
	58			.1	Imports consist mainly of replacement parts (pedals, spokes, chains, etc.) and a smaller proportion of assembled bicycles. Japan, a negligible supplier before 1932, at present accounts for over one-fourth of the total imports. The domestic production of assembled bicycles (not including parts sold for replacements) was valued at $5,100,000 in 1933. Germany, the United Kingdom, and Japan, in the order named, were the principal sources of imports in 1934 and 1935 (8 months). Domestic production of bicycles also increased greatly in 1934.
	2,039			5.3	
	5,989			8.5	
	16,880			13.9	
	33,531			27.6	
	24			(2)	Imports include a wide variety of parts of household and industrial sewing machines. Imported parts are largely used for replacements. The domestic production of sewing machine parts was valued at $2,200,000 in 1933. Imports are very much smaller than exports. Imports of sewing machine parts for purposes other than for use on sewing machines are entered as "Machinery and parts, n. s. p. f."
	3,680			6.6	
	3,740			9.9	
	16,866			30.8	
	29,633			58.8	
	8,249			48.1	
	4,400			(2)	Analyses indicate that the bulk of imports from Japan under this classification consist of parts similar to those used on sewing machines; a large part were entered under the latter classification but later transferred to "machinery and parts, n.s.p.f.," indicating the products may have other uses. Germany and the United Kingdom are the principal sources of imports of machinery and parts n. s. p. f. Domestic production of machinery and parts, except agricultural, in 1933, amounted to $315,000,000.
	4,757			.1	
	4,850			.3	
	20,645			1.0	
	48,749			1.6	
	10,813			.7	
	171,916			5.9	This classification includes book ends, bowls, vases, religious articles, pencil sharpeners, reflectors, frames, compasses, roulette wheels, and many kinds of novelties. Germany is usually the principal source of imports. The total given does not include small imports which enter from Cuba at a preferential rate. Imports from Japan are largely oriental novelties and bazaar articles including incense burners, candlesticks, trays, boxes, etc., generally not comparable or competitive with United States production. Japanese imports are principally of bronze, but in 1934 Japan was also the leading supplier of articles in chief value of tin and pewter, which usually come chiefly from China and Germany. Domestic production of metal articles is large, but statistics are not available.
	109,552			6.4	
	214,709			14.1	
	347,575			23.2	
	248,327			24.8	

[14] When from country imposing a greater duty on imports from United States an equal duty shall be imposed but not greater than 50 percent ad valorem. This provision was repealed by sec. 350 amendment to Tariff Act of 1930, effective June 13, 1934.

[15] By the Trade Agreement between the United States and Sweden, effective Aug. 5, 1935, 6 new classifications were set up with rates of duty at 20 percent or 25 percent ad valorem.

[16] Includes manufactures of iron or steel, aluminum, copper, brass, bronze, lead, nickel, zinc, pewter, tin, and other metal manufactures, n. s. p. f.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
397	Silver-plated articles, not elsewhere specified, partly or wholly manufactured.	60 percent	60.0	60.0	1929			$618,418	
		65 percent	65.0	65.0	1931			253,601	
		do	65.0	65.0	1932			134,705	
		do	65.0	65.0	1933			138,657	
		do	65.0	65.0	1934			95,322	
		do	65.0	65.0	1935[1]			39,596	
397	Brass bases for electric lamp bulbs.	40 percent			1929[4]				
		45 percent			1931[4]				
		do			1932[4]				
		do	45.0	45.0	1933	Number	9,499,047	13,805	$0.001
		do	45.0	45.0	1934	do	8,452,842	12,925	.002
		do	45.0	45.0	1935[1]	do	8,392,432	12,187	.001
404	Japanese white oak, sawed, including flooring.	15 per cent			1929[4]	M feet			
		do	15.0	15.0	1931	do	1,439	68,727	47.76
		do.[17]	20.0	20.0	1932	do	802	29,235	36.45
		do.[17]	23.4	23.4	1933	do	454	16,252	35.80
		do.[17]	20.0	20.0	1934	do	332	19,757	59.51
		do.[17]	20.3	20.2	1935[1]	do	95	5,426	57.12
409	Rattan, bamboo, osier, or willow manufactures, n. s. p. f. (except furniture).	45 percent	45.0	45.0	1929			164,688	
		do	45.0	45.0	1931			176,289	
		do	45.0	45.0	1932			89,499	
		do	45.0	45.0	1933			99,026	
		do	45.0	45.0	1934			147,648	
		do	45.0	45.0	1935[1]			112,540	
411	Baskets and bags of bamboo.[18]	35 percent	35.0	35.0	1929	Number	527,650	42,182	.080
		50 percent	50.0	50.0	1931	do	899,678	59,411	.066
		do	50.0	50.0	1932	do	850,962	32,115	.038
		do	50.0	50.0	1933	do	726,226	27,154	.037
		do	50.0	50.0	1934	do	573,096	37,022	.065
		do	50.0	50.0	1935[1]	do	393,608	24,465	.062
411	Baskets and bags of wood or composition of wood.	35 percent			1929[4]				
		50 percent	50.0	50.0	1931	Number	8,375,325	414,674	.050
		do	50.0	50.0	1932	do	7,528,822	271,703	.036
		do	50.0	50.0	1933	do	5,161,465	253,636	.049
		do	50.0	50.0	1934	do	8,460,463	329,892	.039
		do	50.0	50.0	1935[1]	do	7,060,340	227,834	.032
411	Porch and window blinds, curtains, shades, or screens, of bamboo, wood, straw, papier mâché, palm leaf, or compositions of wood, n. s. p. f.	35 or 45 percent	42.3	42.6	1929			52,174	
		50 percent	50.0	50.0	1931			26,277	
		do	50.0	50.0	1932			16,537	
		do	50.0	50.0	1933			25,401	
		do	50.0	50.0	1934			48,968	
		do	50.0	50.0	1935[1]			81,174	

[1] 8 months.
[4] Not separately classified.
[17] Taxable at $3 per M feet, board measure, under Revenue Act of 1932.
[18] Baskets not specified in classification for 1929.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
----------	$101,911	----------	------	16.5	The imports from Japan consist largely of low price novelties selling principally in the bazaar trade, such as figures of birds and animals, certain vases, and candelabra, favors, bridge prizes and display prizes in establishments operating games of chance, etc. These imports are largely noncompetitive with the higher grade domestic production (which amounted to $608,000 in 1931), or with the higher grade imports from the United Kingdom. The drastic decrease in imports in recent years may be partly due to a tendency to classify many articles under paragraph 339 rather than under this paragraph.
----------	70,579	----------	------	27.8	
----------	27,481	----------	------	20.4	
----------	47,799	----------	------	34.5	
----------	36,188	----------	------	38.0	
----------	17,685	----------	------	44.7	
----------	----------	----------	------	------	Bases for electric lamps consist of the thin threaded brass ring which screws into the socket, the small brass disk forming the center contact, and the dark colored glass which is fused into the ring cementing the two contacts; a portion of imports probably consists of the center disk only. Imports constitute about 2 percent of domestic consumption. One company in the United States produces the bulk of domestic production of electric lamps and makes all its own bases; several smaller firms purchase their bases from the larger company.
----------	----------	----------	------	------	
7,999,047	9,590	$0.001	84.2	69.5	
8,452,842	12,925	.002	100.0	100.0	
8,392,422	12,187	.001	100.0	100.0	
----------	----------	----------	------	------	Japanese white oak is similar to domestic white oak produced in Louisiana, Arkansas, and other States of the lower Mississippi Valley. Imports are insignificant in relation to domestic production of red and white oak, which amounted to 1,082,670,000 board feet in 1934; imports are consumed largely on the west coast and have declined continuously since 1931. Freight rates from Japan to the west coast are considerably lower than either rail rates from the Mississippi Valley or the water rate from New Orleans.
1,439	68,727	47.76	100.0	100.0	
802	29,235	36.45	100.0	100.0	
454	16,252	35.80	100.0	100.0	
332	19,757	59.51	100.0	100.0	
84	4,827	57.46	88.4	89.0	
----------	131,971	----------	------	80.1	This classification covers a wide variety of articles, such as paper lanterns with bamboo ribs, paper parasols with bamboo ribs and rods, bamboo sticks, bamboo lawn rakes and bird cages, rattan carpet beaters and trays, and willow-covered flasks. There is no domestic production of articles of such materials, although many of these articles may be made of other materials in the United States.
----------	132,964	----------	------	75.4	
----------	77,569	----------	------	86.7	
----------	84,321	----------	------	85.2	
----------	119,673	----------	------	81.1	
----------	91,773	----------	------	81.5	
73,767	11,858	.161	14.0	28.1	Available information appears to indicate that imports from Japan consist principally of stained, split-bamboo gift baskets and animal-pet sleeping baskets. The bulk of domestic production consists of unstained commercial baskets for fruit and vegetables and made of veneer splint. Domestic production of novelty baskets is very small.
420,717	38,317	.091	46.8	64.5	
619,186	22,962	.037	72.8	71.5	
548,391	18,908	.034	75.5	69.6	
483,554	27,693	.057	84.4	74.8	
305,397	16,405	.054	77.6	67.1	
----------	----------	----------	------	------	Incomplete information indicates that imports consist largely of fancy, hand-made, stained, and unstained baskets such as are used at Easter and for gift containers for candy, fruit, and flowers. Domestic production consists largely of "commercial" baskets, i. e., unstained baskets used for packing fruits and vegetables, for marketing, and similar purposes, and hampers, coffee drums, splint and wicker trays. Germany, and to a lesser extent Poland and Danzig, are the principal sources of imports.
3,922,215	108,462	.023	46.8	26.2	
3,143,705	50,484	.016	41.8	18.6	
2,609,774	44,926	.017	50.6	17.7	
6,326,623	120,278	.019	74.8	36.5	
5,524,295	97,166	.018	78.2	42.6	
----------	14,125	----------	------	27.1	Imports consist principally of split-bamboo wall and porch screens, standing screens with bamboo frames, and hand-carved wooden screens of high value. The only competitive item of any importance is the split-bamboo porch screen which competes with the domestic porch screen made of thin strips of basswood. Domestic production of these screens, carried on by six companies, amounted to $450,000 in 1933, having declined considerably since 1929. Although the bamboo and basswood screens are dissimilar in appearance and quality, they are to some extent competitive.
----------	9,519	----------	------	36.2	
----------	9,415	----------	------	56.9	
----------	16,300	----------	------	64.2	
----------	41,223	----------	------	84.2	
----------	74,839	----------	------	92.2	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
412	Furniture and parts of, wholly or in chief value of wood, n. s. p. f. (except bentwood) other than chairs.	33⅓ percent	33.3	33.3	1929	----------	----------	[19]$3,404,204	-------
		40 percent	40.0	40.0	1931	----------	----------	1,446,128	-------
		---do---	40.0	40.0	1932	----------	----------	595,418	-------
		---do---	40.0	40.0	1933	----------	----------	616,358	-------
		---do---	40.0	40.0	1934	----------	----------	488,479	-------
		---do---	40.0	40.0	1935[1]	----------	----------	268,341	-------
412	Manufactures of wood or bark, not elsewhere specified.	33⅓ percent	33.3	33.3	1929	----------	----------	2,518,832	-------
		---do---	33.3	33.3	1931	----------	----------	1,269,502	-------
		---do---	33.3	33.3	1932	----------	----------	947,708	-------
		---do---	33.3	33.3	1933	----------	----------	937,564	-------
		---do---	33.3	33.3	1934	----------	----------	1,184,772	-------
		---do---	33.3	33.3	1935[1]	----------	----------	764,869	-------
717	Swordfish, fresh or frozen, whole or beheaded, or eviscerated or boned, but not further advanced.	2 cents pound	16.4	27.1	1929	Pound	723,821	88,353	$0.122
		---do---	20.5	29.8	1931	---do---	2,127,889	207,417	.097
		---do---	31.8	33.9	1932	---do---	1,552,512	97,758	.063
		---do---	22.7	31.2	1933	---do---	2,633,935	232,349	.088
		---do---	17.6	27.4	1934	---do---	2,950,484	334,933	.114
		---do---	21.0	24.3	1935[1]	---do---	1,745,625	166,132	.095
717	Fish, fresh or frozen, filleted, skinned, boned, sliced, or divided, n. s. p. f.	2½ cents pound or 25 percent.[20]	------	-----	1929[4]	----------	----------	----------	-------
		2½ cents pound.	23.0	22.4	1931	Pound	3,008,143	326,578	.109
		---do---	22.9	18.5	1932	---do---	1,781,698	194,765	.109
		---do---	23.9	19.0	1933	---do---	2,504,541	261,523	.104
		---do---	21.1	28.3	1934	---do---	3,942,094	467,749	.119
		---do---	25.2	25.3	1935[1]	---do---	2,365,860	234,422	.099
717	Fish, other than cod, haddock, hake, pollack, and cusk, dried and unsalted.[21]	1¼ cents pound.	------	-----	1929[4]	----------	----------	----------	-------
		---do---	7.7	7.7	1931	Pound	1,759,469	283,949	.161
		---do---	16.7	13.3	1932	---do---	3,229,652	241,154	.075
		---do---	13.0	14.3	1933	---do---	3,044,345	292,252	.096
		---do---	11.3	12.6	1934	---do---	3,573,218	396,522	.111
		---do---	10.3	11.7	1935[1]	---do---	1,022,573	124,490	.122

[1] 8 months.
[4] Not separately classified.
[19] Classified as "Wood furniture, n. s. p. f." Imports valued at $9,700 from Czechoslovakia and Poland and Danzig, considered "Bentwood furniture" are not included in this total.
[20] 25 percent if in containers weighing with contents not more than 15 pounds each.
[21] Salted and unsalted fish not separated in 1929.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
----------	$33,631	----------	------	1.0	Wood furniture consists of two broad groups referred to as "commercial" and "noncommercial" furniture, the latter consisting of distinctive articles produced as individual pieces or in small quantities of a single model or pattern to meet a limited demand. The bulk of imports consist of noncommercial furniture; imports from Japan consist chiefly of pieces of oriental style and design such as are not produced in the United States. Total production of wood furniture in the United States amounted to $247,000,000 in 1933, of which a relatively small portion was of the noncommercial type. In 1934, Italy, the United Kingdom, and France were the principal sources of imports.
----------	32,812	----------	------	2.3	
----------	32,203	----------	------	5.4	
----------	56,408	----------	------	9.2	
----------	52,350	----------	------	10.7	
----------	36,879	----------	------	13.7	
----------	334,426	----------	------	13.3	Analysis of imports indicates the most important item imported from Japan in this classification is brush blocks, chiefly ebony, for the manufacture of brushes. Formerly ebony logs were imported and made into blocks for sale to brush manufacturers, but in recent years this practice has been largely discontinued. Other important items are inlaid, carved, or lacquered boxes and trays, oriental in design, novel in character and largely noncompetitive. In addition, imports include a wide variety of articles such as salad spoons and bowls, stands, racks, noisemakers, beverage sets, thermometers, games, etc., most of which are novelty items and offer no important competition to domestic products. Other important sources of imports under this classification are Germany and France.
----------	264,439	----------	------	20.8	
----------	167,099	----------	------	17.6	
----------	266,677	----------	------	28.4	
----------	483,230	----------	------	40.8	
----------	286,623	----------	------	37.5	
53,654	3,956	$0.074	7.4	4.5	Imports from Japan consist of frozen swordfish; imports from Canada (the only other supplier) are almost entirely fresh. The domestic catch, about 7,200,000 pounds in 1929 and 4,800,000 pounds in 1933, is landed in summer, and is usually first offered for sale on the fresh fish market; such quantities as cannot be advantageously disposed of there are frozen. Freezing is almost always done when prices on the fresh fish market are low. The domestic production of frozen swordfish was about 600,000 pounds in 1932, nearly 1,100,000 pounds in 1933, and about 500,000 pounds in 1934. Imports from Japan enter during the fall and winter and are marketed at the same time and in the same regions as the domestic frozen pack.
1,011,874	67,880	.067	47.6	32.7	
518,991	30,576	.059	33.4	31.3	
879,414	56,371	.064	33.4	24.3	
1,463,060	106,843	.073	49.6	31.9	
626,334	51,627	.082	35.9	31.1	
----------	----------	----------	------	------	The bulk of imports under this classification comes from Canada and consists of fillets. Imports from Japan are frozen fish which enter chiefly at the west coast ports. Domestic production of fish filleted, skinned, boned, sliced, or divided into portions amounted to 68,000,000 pounds in 1933, valued at $7,895,000.
4,541	510	.112	.2	.2	
1,771	238	.134	.1	.1	
3,426	453	.132	.1	.2	
386,547	34,169	.088	9.8	7.3	
47,347	4,673	.099	2.0	2.0	
----------	----------	----------	------	------	The Japanese are large producers and consumers of boiled and dried fish of various species; they use these dried fish in soups, sauces, etc. Imports from Japan are consumed principally by Orientals living in Hawaii and California. Domestic production of dried and unsalted fish other than cod is small. The larger part of imports under this classification comes from Norway and consists of dried unsalted cod known commercially as "stockfish", but dutiable in this paragraph with fish dried and unsalted other than cod, haddock, hake, pollock and cusk, under a customs court decision.
1,248,137	203,842	.163	70.9	71.8	
1,227,242	115,341	.094	38.0	47.8	
1,200,591	104,677	.087	39.4	35.8	
1,161,295	115,318	.099	32.5	29.1	
681,830	72,547	.106	66.7	58.3	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
718	Tuna fish in oil, or in oil and other substances.	30 percent			1929 [4]				
		do	30.0	30.0	1931	Pound	[22] 937,029	[22] $165,823	$0.177
		do	30.0	30.0	1932	do	5,945,180	714,428	.120
		do	30.0	30.0	1933	do	14,382,168	1,969,134	.137
		do	30.0	30.0	1934	do	3,344,035	508,706	.152
		45 percent [23]	45.0	45.0	1934	do	4,611,573	727,777	.158
		do	45.0	45.0	1935 [1]	do	5,759,083	877,988	.153
718	Salmon, not in oil, or in oil and other substances, in airtight containers weighing, with contents, not over 15 pounds each.	25 percent	25.0	25.0	1929	do	183,571	23,533	.128
		do	25.0	25.0	1931	do	137,350	12,653	.092
		do	25.0	25.0	1932	do	5,307,011	230,019	.043
		do	25.0	25.0	1933	do	4,815,768	227,312	.047
		do	25.0	25.0	1934	do	220,465	17,983	.082
		do	25.0	25.0	1935 [1]	do	470,591	34,816	.074
718	Fish cakes, balls, and pudding, not in oil, or in oil and other substances, in airtight containers weighing, with contents, not over 15 pounds each.	do			1929 [4]				
		do	25.0	25.0	1931	Pound	911,219	70,715	.078
		do	25.0	25.0	1932	do	1,372,277	62,291	.045
		do	25.0	25.0	1933	do	1,746,804	91,103	.052
		do	25.0	25.0	1934	do	1,650,803	117,623	.071
		do	25.0	25.0	1935 [1]	do	1,101,210	73,639	.067
718	Other fish (except anchovies, herring, and sardines), not in oil, or in oil and other substances, in airtight containers weighing, with contents, not over 15 pounds each.	25 percent			1929 [4]				
		do	25.0	25.0	1931	Pound	1,466,993	187,089	.128
		do	25.0	25.0	1932	do	1,488,360	125,560	.084
		do	25.0	25.0	1933	do	1,538,446	133,499	.087
		do	25.0	25.0	1934	do	2,047,785	239,679	.117
		do	25.0	25.0	1935 [1]	do	855,862	93,233	.109
719	Cod, haddock, hake, pollock, and cusk neither skinned nor boned, etc., containing not more than 43 percent of moisture by weight, pickled or salted (except fish packed in oil etc., and except fish packed in air-tight containers, weighing with contents not more than 15 pounds each.)	1¼ cents pound or 25 percent. [20]			1929 [4]				
		1¼ cents pound. [24]	21.4	20.1	1931	Pound	23,350,117	1,367,042	.059
		do	27.7	43.1	1932	do	18,405,482	829,753	.045
		do	26.9	39.6	1933	do	12,164,979	564,847	.046
		do	23.0	30.4	1934	do	6,303,454	342,219	.054
		do	23.1	24.8	1935 [1]	do	2,537,462	137,243	.054
719	Fish, pickled or salted, n. s. p. f. (except fish packed in oil, etc., and except fish packed in air-tight containers weighing with their contents not more than 15 pounds each), in bulk or in containers weighing, with contents, more than 15 pounds each.	1¼ cents pound. [24]			1929 [4]				
		do	14.0	23.8	1931	Pound	1,590,668	142,217	.089
		do	16.3	44.9	1932	do	1,263,527	96,989	.077
		do	20.6	38.0	1933	do	1,130,198	68,529	.061
		do	15.9	29.0	1934	do	[25] 954,248	[25] 75,107	.079
		do	13.3	31.9	1935 [1]	do	436,415	40,878	.094

[1] 8 months.
[4] Not separately classified.
[20] 25 percent if in containers weighing with contents not more than 15 pounds each.
[21] Reports from collectors of customs at Boston, New York, San Francisco, Los Angeles, and Seattle.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
[22] 648,900	[22] $127,461	$0.196	69.2	76.9	Imports from Japan consist chiefly of canned albacore (1 of the several species of tuna) packed in cottonseed oil. As result of an investigation under sec. 336 of the Tariff Act of 1930, the President proclaimed an increase in duty from 30 to 45 percent, effective Jan. 13, 1934. The domestic pack of tuna amounted to 45,032,160 pounds in 1930, declined to 27,659,409 pounds in 1932, and increased to 45,537,888 pounds in 1934, the largest on record. Consumption has increased considerably in recent years. In 1931, 1932, 1933, and 1934 imports supplied 3 percent, 18 percent, 31 percent, and 15 percent, respectively, of domestic consumption.
5,070,620	652,686	.129	85.3	91.4	
14,219,206	1,949,649	.137	98.9	99.0	
3,314,528	502,265	.152	99.1	98.7	
4,253,173	701,667	.165	92.2	96.4	
5,284,038	845,004	.160	91.8	96.2	
136,933	16,426	.120	74.6	69.8	In the period 1925–34, inclusive, domestic production of canned salmon averaged 314,000,000 pounds annually, production of 401,000,000 pounds in 1934 being the largest during the period. In no one year have imports constituted more than 2 percent of consumption. Exports, which usually exceed imports many times, amounted to 49,065,899 pounds in 1934. Canada is an important, and in some years the principal, source of imports.
127,295	11,331	.089	92.7	89.6	
984,394	39,176	.040	18.5	17.0	
969,803	42,038	.043	20.1	18.5	
201,865	16,698	.083	91.6	92.9	
151,692	14,348	.095	32.2	41.2	
177,086	17,428	.098	19.4	24.6	Imports from Japan consist chiefly of specialties, of types not produced in the United States and consumed chiefly by orientals living in this country. Norway is the principal source of imports under this classification.
436,492	20,343	.047	31.8	32.7	
795,156	44,802	.056	45.5	49.2	
615,322	47,289	.077	37.3	40.2	
302,095	23,390	.077	27.4	31.8	
535,286	73,666	.138	36.5	39.4	Imports from Japan consist chiefly of specialties consumed largely by orientals living in the United States. Domestic production of the canned fish included in this classification consists principally of mackerel, alewives, and shad.
964,837	64,376	.067	64.8	51.3	
1,245,600	92,836	.075	81.0	69.5	
1,265,751	153,990	.122	61.8	64.2	
538,136	50,652	.094	62.9	54.3	
437,755	27,272	.062	1.9	2.0	Dry salted cod and related species are imported principally from Canada and Newfoundland; Japan is a relatively unimportant supplier. A considerable proportion of the imports from Japan is sold in California, while the bulk of imports from Canada is sold in Puerto Rico and Massachusetts. Imports of dry salted fish have declined sharply since 1931 but imports of wet salted fish (dutiable at a lower tariff rate than dry salted) have more than doubled during this period. Japan does not supply the wet salted fish. The domestic production of dry salted cod and related species is relatively small (estimated at 3.5 million pounds in 1931). The bulk of the domestic catch is usually disposed of at more advantageous prices, as fresh or frozen fish, than for salting.
922,753	26,792	.029	5.0	3.2	
692,022	21,836	.032	5.7	3.9	
530,897	21,821	.041	8.4	6.4	
405,400	20,446	.050	16.0	14.9	
663,323	34,822	.052	41.7	24.5	The bulk of imports from Japan enters at Hawaii and consists chiefly of distinctive oriental specialties consumed principally by orientals living in Hawaii and California. Hong Kong and the Union of Soviet Socialist Republics are important sources.
540,542	15,049	.028	42.8	15.5	
518,091	17,049	.033	45.8	24.9	
445,666	19,192	.043	46.7	25.6	
161,151	6,309	.039	36.9	15.4	

[22] Rate changed by Presidential proclamation, effective Jan. 13, 1934.
[24] Net weight.
[25] In addition, imports from Philippine Islands entered free of duty amounted to 211,759 pounds valued at $4,536.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
721	Crab meat, crab sauce, and crab paste.	15 percent	15.0	15.0	1929	Pound	10,346,999	$4,646,504	$0.449
		do	15.0	15.0	1931	do	11,426,096	4,430,721	.388
		do	15.0	15.0	1932	do	8,869,673	3,111,109	.351
		do	15.0	15.0	1933	do	9,526,113	2,893,435	.304
		do	15.0	15.0	1934	do	7,382,142	2,238,757	.303
		do	15.0	15.0	1935[1]	do	7,104,222	2,258,275	.318
721	Clams, clam juice, or either in combination with other substances, in air-tight containers.	Free			1929[4]				
		35 percent	35.0	35.0	1931	Pound	1,056,296	154,088	.146
		do	35.0	35.0	1932	do	1,483,894	153,771	.104
		do	35.0	35.0	1933	do	1,417,315	131,856	.093
		do [36]	34.9	35.0	1934	do	1,401,757	171,409	.121
		do [36]	34.9	35.0	1935[1]	do	713,263	153,407	.215
727	Rice, uncleaned or brown rice.	1¼ cents per pound.	27.7	24.0	1929	do	2,529,973	114,049	.045
		1½ cents per pound.	67.5	69.3	1931	do	5,863,787	130,368	.022
		do	71.2	71.0	1932	do	1,397,078	29,440	.021
		do	70.5	69.5	1933	do	2,297,752	48,881	.021
		do	59.1	56.2	1934	do	3,435,124	87,223	.025
		do	53.2	48.7	1935[1]	do	1,809,840	51,061	.028
727	Rice, cleaned or milled.	2 cents per pound.	46.6	33.6	1929	do	16,121,766	691,969	.043
		2½ cents per pound.	89.1	62.8	1931	do	16,128,263	452,755	.028
		do	102.5	102.8	1932	do	13,619,734	332,118	.024
		do	117.0	96.5	1933	do	10,834,273	231,418	.021
		do	86.2	79.3	1934	do	[37] 12,345,838	[37] 357,898	.029
		do	87.3	71.1	1935[1]	do	8,248,080	236,223	.029
727	Broken rice and rice meal, flour, polish, and bran.	½ cent per pound.	8.1	8.4	1929	do	686,906	42,204	.061
		⅝ cent per pound.	12.0	11.5	1931	do	587,439	30,607	.052
		do	19.0	20.9	1932	do	546,186	18,006	.033
		do	44.5	23.6	1933	do	8,117,742	114,054	.014
		do	48.1	19.5	1934	do	[38] 35,247,322	[38] 457,644	.013
		do	47.7	16.2	1935[1]	do	22,105,355	289,897	.013

[1] 8 months.
[4] Not separately classified.
[36] By Presidential proclamation, effective May 31, 1934, the rate on canned razor clams was reduced to 23 percent ad valorem and the rate on other clams remained at 35 percent ad valorem but was based on American selling price; and the rate on clam chowder, clam juice, and clam juice in combination with other substances was retained at 35 percent ad valorem on foreign value.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
10,103,625	$4,538,397	$0.449	97.6	97.7	Imports consist almost wholly of canned crab meat. For the 10-year period 1925 to 1934 annual imports averaged 9,758,000 pounds, valued at $3,752,000, with Japan supplying 87 percent of the total. Imports have declined considerably in recent years. From 90 to 95 percent of domestic production is sold fresh, the remainder being canned chiefly in Alaska. Distribution of fresh crab meat is restricted by the perishability of the product, which must be kept in crushed ice until sold for consumption. In 1933 domestic production consisted of 6,863,844 pounds of fresh crab meat, valued at $1,662,497, and 445,056 pounds of canned meat, valued at $143,517. Production of canned crab meat in Alaska was resumed in 1931 after 6 years of nonproduction, and increased from 6,312 pounds in that year to 544,311 pounds in 1934.
9,361,376	3,748,228	.400	81.9	84.6	
6,358,106	2,275,852	.358	71.7	73.2	
6,942,687	2,056,774	.296	72.9	71.1	
5,231,832	1,746,828	.334	70.9	78.0	
5,654,483	1,962,335	.347	79.6	86.9	
947,518	131,232	.139	89.7	85.2	Imports from Japan consist almost entirely of canned baby and white clams which compete with various domestic species other than razor clams. During the period 1931–34 annual production of canned clams (excluding razor clams) averaged 112,000 cases of various sizes, of which 11 percent consisted of little neck and butter clams packed in Washington and Alaska, the remainder being hard and soft clams canned along the Atlantic and Gulf Coasts. (The bulk of the production of clams along the Atlantic and Gulf Coasts is either consumed fresh or is canned as clam chowder which is not included in the production figures given above.) Pacific coast clams and imported clams are sold only in small quantities east of the Rocky Mountains, while Atlantic and Gulf Coast canned clams are sold only in small quantities in the West.
1,312,442	125,598	.096	88.4	81.7	
1,371,278	123,788	.090	96.8	92.9	
1,288,460	161,452	.125	91.9	94.2	
696,792	150,456	.216	97.7	98.1	
1,415,098	73,604	.052	55.9	64.5	Uncleaned or brown rice is rice which has had the hulls removed but retains all the bran layers and most of the germ. It is consumed in this form, especially by the Japanese. The bulk of imports enter at Hawaii. Imports are entirely negligible in comparison with domestic production of all types of rice, which exceeds 1,800,000,000 pounds annually, or with domestic production of Japan-type rice (the round-grain type preferred by the Japanese in the United States and Hawaii) which amounted to 380,000,000 pounds in 1934. Japan proper is on an import basis as regards rice, purchasing large quantities from Chosen and Formosa.
5,024,823	108,792	.022	85.7	83.4	
1,368,839	28,926	.021	98.0	98.3	
1,947,580	42,019	.022	84.8	86.0	
2,468,781	65,881	.027	71.9	75.5	
1,335,770	41,117	.031	73.8	80.5	
478,127	26,887	.056	3.0	3.9	Imports of cleaned or milled rice entered in this paragraph include types other than cleaned Patna rice which is used in canned soups and which enters free of duty under par. 1752. Japan is on an import basis as regards rice, and is an unimportant source of imports into the United States. Substantial shipments are received from the Philippine Islands; in 1934, Hong Kong, Mexico, China, and Italy were the principal sources of imports. Domestic production of rice of all types exceeds 1,800,000,000 pounds annually, and exports are greatly in excess of imports.
238,493	9,840	.040	1.5	2.1	
221,760	5,394	.024	1.6	1.6	
208,142	5,390	.026	1.9	2.3	
412,486	12,907	.032	3.3	3.6	
104,701	3,681	.035	1.3	1.6	
476,684	28,234	.059	69.4	66.9	Since 1932, the bulk of imports under this classification has consisted of brewers' rice, although the classification includes food rice and rice feeds. Imports from Japan probably consist chiefly of rice for food, although some entering Hawaii may have been brewers' rice. Although imports of brewers' rice constitute a substantial part of domestic consumption, imports of rice for food are negligible in relation to domestic production. The Netherlands and Germany are the principal sources of imports.
400,179	21,808	.054	68.1	71.3	
364,980	10,893	.030	66.8	60.5	
431,801	11,420	.026	5.3	10.0	
426,918	13,691	.032	1.2	3.0	
269,458	10,385	.039	1.2	3.6	

[37] In addition imports from Philippine Islands entered free of duty amounted to 10,421,896 pounds valued at $304,022.

[38] In addition imports from Philippine Islands entered free of duty amounted to 1,012,637 pounds valued at $28,824.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
730	Soybean oil cake and oil-cake meal.	Free	----	----	1929	Pound	171,854,858	$3,618,335	$0.021
		3/10 cent per pound.	27.1	27.1	1931	do	39,620,454	438,804	.011
		do	32.1	36.5	1932	do	36,568,700	341,857	.009
		do	34.1	35.7	1933	do	66,701,815	586,998	.009
		do	30.9	31.0	1934	do	60,387,348	586,784	.010
		do	28.5	22.1	1935[1]	do	98,672,014	1,370,050	.011
730	Linseed oil cake and oil-cake meal.	Free	----	----	1929	do	69,284,916	1,669,421	.024
		3/10 cent per pound.	27.5	28.2	1931	do	18,808,000	204,916	.011
		do	31.9	34.2	1932	do	22,388,384	210,671	.009
		do	39.4	40.2	1933	do	24,950,459	189,746	.008
		do	34.0	34.5	1934	do	16,151,478	142,697	.009
		do	28.3	28.7	1935[1]	do	15,332,202	162,699	.011
733	Biscuits, wafers, pudding, cakes, and other baked articles.	30 percent	30.0	30.0	1929	----	----	622,342	----
		do	30.0	30.0	1931	----	----	413,476	----
		do	30.0	30.0	1932	----	----	265,196	----
		do	30.0	30.0	1933	----	----	239,723	----
		do	30.0	30.0	1934	----	----	284,973	----
		do	30.0	30.0	1935[1]	----	----	131,082	----
738	Vinegar	6 cents per proof gallon.	18.7	17.2	1929	Proof gallon.	245,062	78,604	.321
		8 cents per proof gallon.	27.0	23.3	1931	do	213,991	62,994	.294
		do	39.0	41.1	1932	do	199,645	40,786	.204
		do	36.9	46.9	1933	do	202,734	43,895	.217
		do	36.0	39.9	1934	do	192,863	42,843	.222
		do	30.5	40.5	1935[1]	do	93,991	24,664	.262
743	Oranges	1 cent per pound.	14.5	14.0	1929	Pound	1,222,254	84,403	.069
		do	21.0	21.2	1931	do	1,365,051	104,018	.047
		do	29.7	29.7	1932	do	1,548,413	52,162	.034
		do	28.2	28.2	1933	do	1,512,744	53,653	.035
		do	25.9	26.0	1934	do	1,847,444	71,337	.039
		do	26.8	----	1935[1]	do	4,842	181	.037

[1] 8 months.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
28,699,147	$575,959	$0.020	16.7	15.9	In the United States soybean meal is used almost exclusively as a livestock food, as it is of high-protein content and highly desirable for this use. Prior to 1935, imports, largely from Kwantung, entered principally on the west coast, an area deficient in high-protein content stock feeds; in 1935 (8 months), however, about half of imports have entered at Atlantic coast ports. The latter development is probably a temporary phenomenon due to the shortage of domestic cattle feeds occasioned by the drought of 1934. Domestic production is almost entirely from domestically grown beans and takes place primarily where the beans are grown, chiefly in the Middle Western States. Production, which varies with soybean production, amounted to 199,896,000 pounds in 1934, but it is predicted that with the large crop of beans in 1935 production of meal will be almost double that figure. Very little domestic meal is shipped to the west coast, due to a considerable transportation disadvantage, consumption in that area being supplied largely by imports. Soybean oil-cake meal competes with other oil cakes and meals, especially that made from cottonseed and linseed.
5,367,500	59,421	.011	13.5	13.5	
3,718,386	30,526	.008	10.2	8.9	
7,154,364	60,073	.008	10.7	10.2	
6,245,653	60,353	.010	10.3	10.3	
5,274,447	71,549	.014	5.3	6.9	
28,002,000	638,601	.023	40.4	38.3	Linseed oil-cake is a byproduct in the manufacture of linseed oil from flaxseed; the meal is made by grinding the cake. Meal and cake are used as high-grade stock feeds. Domestic production, about half of which is made from imported seeds, has decreased continuously from 1,504,000,000 pounds in 1929 to 681,258,000 pounds in 1934, due to decreased demand for linseed oil but indications are that 1935 production both from domestic and imported seed is greatly accelerated. About half of domestic production, made chiefly in the Eastern United States from flaxseed imported from Argentina, is exported, a drawback being received for the duty paid on the flaxseed. The remainder is produced in the North Central States from domestic flaxseed and used in that region or shipped East. There is a deficiency of high-protein feeds on the west coast, supplied in part by imports from Japan. Eastern producers find exportation more profitable than shipment to the west coast in view of high transportation rates and the fact that a drawback is received on exported cake and meal made from imported flaxseed.
13,460,000	142,992	.011	71.6	69.8	
16,095,584	141,011	.009	71.9	66.9	
24,300,459	181,497	.007	97.4	95.7	
15,484,078	134,495	.009	95.9	94.3	
12,978,668	135,579	.010	84.6	83.3	
----------	57,438	----------	------	9.2	This classification covers practically all bakery products except bread. Imports are negligible in relation to domestic production and consist of specialties not generally produced in the United States. Imports from Japan are believed to be largely products made of rice and consumed by orientals residing in this country or served in oriental restaurants. The United Kingdom is the principal source of imports.
----------	49,459	----------	------	12.0	
----------	33,521	----------	------	12.6	
----------	45,066	----------	------	18.8	
----------	55,046	----------	------	19.3	
----------	42,953	----------	------	32.8	
63,749	22,279	.349	26.0	28.3	Imports from Japan consist primarily of rice vinegar and are consumed by orientals in the United States who prefer its flavor to that of the cider and distilled vinegar produced in vast quantities in the United States. Little or no rice vinegar is produced domestically. Domestic production of vinegar was valued at $15,872,000 in 1929, and at $9,658,167 in 1933. Exports exceed imports, but both are unimportant. Canada and the United Kingdom are sources of imports.
65,307	22,383	.343	30.5	35.5	
63,946	12,458	.195	32.0	30.5	
73,322	12,504	.171	36.2	28.5	
65,041	13,053	.201	33.7	30.5	
39,987	7,898	.198	42.5	32.0	
1,127,970	80,691	.072	92.3	95.6	Statistics do not include small imports from Cuba entered at a preferential rate of duty. Imports from Japan consist of Mandarin type oranges entered usually in December (for the holiday trade) through the Washington customs district, and packed in direct consumer-size boxes. Total imports in 1934 amounted to less than a tenth of 1 percent of domestic consumption and to only 6 percent of the oranges consumed in the city of Seattle alone in 1934. Domestic production for the year ended Sept. 30, 1935 amounted to 58,351,000 boxes.
1,339,875	63,332	.047	98.2	98.9	
1,548,398	52,159	.034	100.0	100.0	
1,512,689	53,650	.035	100.0	100.0	
1,842,685	70,960	.039	99.7	99.5	
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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
747	Pineapples, prepared or preserved, n.s.p.f.	2 cents per pound.	32.0	34.8	1929	Pound	2,230,214	$139,507	$0.063
		do	40.3	62.2	1931	do	1,292,080	64,180	.050
		do	71.6	269.0	1932	do	1,445,573	40,389	.028
		do	65.5	397.6	1933	do	1,112,929	33,990	.031
		do	44.3	45.0	1934	do	2,470,766	111,435	.045
		do	43.3	43.8	1935[1]	do	3,411,088	157,738	.046
752	Fruits, n.s.p.f., natural in brine, pickled, dried, desiccated, evaporated, or otherwise prepared or preserved.	35 percent	35.0	35.0	1929	do	19,854,432	717,153	.036
		do	35.0	35.0	1931	do	11,155,684	405,078	.036
		do	35.0	35.0	1932	do	10,778,705	327,478	.030
		do	35.0	35.0	1933	do	----------	246,106	-------
		do	35.0	35.0	1934	do	----------	358,136	-------
		do	35.0	35.0	1935[1]	do	----------	302,387	-------
753	Lily bulbs	3/10 cent each.	------	-----	1929[4]	----------	----------	----------	-------
		5/10 cent each.	15.0	15.3	1931	Number	17,465,891	704,804	.040
		do	22.6	24.4	1932	do	14,246,428	377,695	.027
		do	23.5	24.9	1933	do	16,818,323	429,466	.026
		do	22.8	24.9	1934	do	18,022,438	473,328	.026
		do	19.5	25.8	1935[1]	do	5,307,500	163,287	.031
764	Turnip seed, other than rutabaga.	4 cents per pound.	33.0	14.8	1929	Pound	717,029	86,863	.121
		5 cents per pound.	46.2	36.5	1931	do	1,090,140	118,102	.108
		do	51.8	64.5	1932	do	482,057	46,504	.096
		do	62.4	66.9	1933	do	1,211,931	97,044	.080
		do	47.2	45.4	1934	do	1,012,383	107,137	.106
		do	51.5	72.8	1935[1]	do	557,427	54,143	.097
764	Flower seed	6 cents per pound.	4.9	7.6	1929	do	249,092	305,638	1.23
		do	5.0	6.4	1931	do	183,885	203,563	1.11
		do	5.6	7.3	1932	do	131,656	140,498	1.07
		do	4.9	9.0	1933	do	100,752	124,057	1.23
		do	3.3	4.4	1934	do	90,405	164,477	1.82
		do	3.5	4.2	1935[1]	do	45,149	76,767	1.70
765	Dried beans, n.s.p.f.	1¾ cents pound.	30.6	31.7	1929	100-pound bag.	938,349	5,358,320	$5.70
		3 cents pound	98.4	120.8	1931	do	420,359	$1,281,314	3.00
		do	107.8	189.3	1932	do	82,638	229,933	2.80
		do	117.4	156.1	1933	do	83,567	213,475	2.60
		do	133.3	175.1	1934	do	137,972	310,462	2.30
		do	127.3	162.9	1935[1]	do	308,928	727,983	2.40
768	Dried mushrooms	45 percent	45.0	45.0	1929	Pound	839,943	695,766	.828
		10 cents pound and 45 percent.	63.2	56.8	1931	do	626,646	343,590	.548
		do	67.1	70.7	1932	do	513,704	231,981	.452
		do	67.0	73.3	1933	do	523,152	237,947	.454
		do	63.1	64.4	1934	do	455,791	251,569	.552
		do	62.6	62.3	1935[1]	do	254,818	144,720	.568

[1] 8 months.
[4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
231,518	$13,302	$0.057	10.4	9.5	These import statistics do not include imports from Cuba (1,610,753 pounds in 1934) entering at a preferential rate. Imports consist chiefly of canned pineapples
202,761	6,521	.032	15.7	10.2	from Japan (Formosa) and pineapples in brine from
362,453	2,695	.007	25.1	6.7	British Malaya. There is no production of canned
132,212	665	.005	11.9	2.0	pineapples in continental United States but shipments
1,541,941	68,591	.044	62.4	61.6	from Hawaii to the United States amounted to
2,424,928	110,868	.046	71.2	70.3	540,935,612 pounds in 1934; in addition about 5½ million pounds were shipped to the United States from Puerto Rico and the Philippine Islands. Imports are negligible in relation to domestic production. Exports amounted to over 20,000,000 pounds in 1934.
53,625	6,191	.115	.3	.9	This classification includes a wide variety of natural or
149,946	19,730	.132	1.3	4.9	prepared fruits. An analysis of imports at New York
231,786	21,475	.093	2.2	6.6	for 1934 indicates that the bulk of imports consists of
----------	22,843	----------	------	9.3	canned mandarin oranges. There is no evidence that
----------	64,078	----------	------	17.9	oranges are canned in the United States. Imports
----------	73,975	----------	------	24.5	from Mexico, Chile, and Spain, the important sources, consist chiefly of melons.
----------	----------	----------	------	------	About 90 percent of the total imports of lily bulbs consist
15,007,934	588,864	.039	85.9	83.6	of the nonhardy Easter type. The United States has long been dependent upon Japan for the bulk of its
12,607,648	310,162	.025	88.5	82.1	requirements of Easter lily bulbs. Domestic produc-
15,692,276	377,946	.024	93.3	88.0	tion is small; in 1929, the only year for which data are
16,885,696	407,333	.024	93.7	86.1	available, only 86,000 domestic Easter lily bulbs were
4,192,224	97,559	.023	79.0	59.7	marketed.
42,007	11,317	.269	5.9	13.0	Imports of turnip seed are approximately equal to the
55,072	7,535	.137	5.1	6.4	domestic production, about 1,000,000 pounds annually. The imported product is preferred by some seedsmen and it usually averages somewhat higher in price than
37,415	2,901	.078	7.8	6.2	the domestic. Japan ranks after the United Kingdom
60,849	4,546	.075	5.0	4.7	and the Netherlands as a source of imports.
116,405	12,818	.110	11.5	12.0	
211,108	14,504	.069	37.9	26.8	
41,018	32,555	.794	16.5	10.7	An analysis of imports for the period July 1, 1928, to Dec. 31, 1929, disclosed that imports from Japan include
24,045	22,494	.935	13.1	11.1	seeds of a large number of the flowers grown in the
15,889	13,097	.824	12.1	9.3	United States. Imports from Japan consist of the
19,421	12,890	.664	19.3	10.4	lowest-priced flower seed imported. Domestic produc-
18,526	25,197	1.36	20.5	15.3	tion is estimated to be very large; imports are small in
4,725	6,763	1.43	10.5	8.8	comparison. Total imports, as well as imports from Japan, have declined greatly since 1929. The Netherlands supplies over half of the imports, Japan ranking second (in value) as a source in 1934.
247,969	1,369,586	5.50	26.4	25.6	Imports are edible dried beans similar to the common
265,921	660,468	2.50	63.3	51.5	edible beans produced in the United States. Imports
19,848	31,379	1.60	24.0	13.6	came principally from Japan until 1932 when Mexico
18,873	36,279	1.90	22.6	17.0	and Hong Kong became the principal suppliers. The
19,706	33,767	1.70	14.3	10.9	ratio of imports to domestic production, based upon
75,332	138,767	1.80	24.4	19.1	quantity, was about 10 percent during the peak years 1928 to 1930 and about 1 percent from 1931 to 1934. Exports, formerly very large, are now considerably smaller than imports.
153,698	164,352	1.069	18.3	23.6	Mushrooms which enter trade in dried form are not
152,621	129,524	.849	24.4	37.7	usually the common or cultivated type but grow wild in Europe and the Orient, are dried in peasants' homes and collected by merchants. From 10 to 12 pounds of
69,482	27,041	.389	13.5	11.7	fresh mushrooms are required to yield 1 pound in dried
103,657	36,606	.353	19.8	15.4	form. There is no domestic production of dried mush-
115,443	59,486	.515	25.3	23.6	rooms, although this product competes indirectly, for
79,476	46,063	.580	31.2	31.8	certain uses with the domestic fresh and canned product. The equivalent ad valorem of the duty has varied from 63 to 67 percent under the Tariff Act of 1930. Poland-Danzig was the principal source of imports in 1934; France, Italy, Yugoslavia, and China are also important sources.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
768	Mushrooms, prepared or preserved.	45 percent	45.0	45.0	1929	Pound	7,845,249	$1,748,647	$0.223
		10 cents pound and 45 percent.	81.4	77.5	1931	do	2,773,249	761,084	.274
		do	86.4	105.4	1932	do	1,981,574	478,260	.241
		do	84.8	99.2	1933	do	1,416,600	355,821	.251
		do	77.4	92.3	1934	do	820,237	253,407	.309
		do	76.1	90.5	1935[1]	do	361,273	116,099	.321
769	Peas (except cowpeas and chickpeas), dried.	1 cent pound	26.4	33.6	1929	Bushel of 60 pounds	352,711	801,665	2.27
		1¾ cents pound.	51.1	67.9	1931	do	112,969	232,091	2.05
		do	56.9	52.0	1932	do	133,794	247,053	1.85
		do	55.5	55.7	1933	do	174,930	330,895	1.89
		do	36.2	59.0	1934	do	140,213	406,512	2.90
		do	41.5	68.7	1935[1]	do	79,662	201,741	2.53
775	Sauces, n. s. p. f.	35 percent	35.0	35.0	1929	Pound	12,823,309	854,457	.067
		do	35.0	35.0	1931	do	10,997,389	558,780	.051
		do	35.0	35.0	1932	do	11,549,487	431,698	.037
		do	35.0	35.0	1933	do	11,453,371	367,153	.032
		do	35.0	35.0	1934	do	11,724,468	405,106	.035
		do	35.0	35.0	1935[1]	do	6,922,398	267,036	.039
775	Pickled vegetables	do			1929		([29])	([29])	
		do			1931		([29])	([29])	
		do			1932		([29])	([29])	
		do	35.0	35.0	1933	Pound	3,492,857	166,826	.048
		do	35.0	35.0	1934	do	[30] 2,588,423	161,757	.062
		do	35.0	35.0	1935[1]	do	1,612,978	106,851	.066
775	Bean cake or stick, miso, and similar products, n. s. p. f.	do	35.0	35.0	1929	do	904,076	69,337	.077
		do	35.0	35.0	1931	do	763,989	42,245	.055
		do	35.0	35.0	1932	do	960,086	34,776	.036
		do	35.0	35.0	1933	do	1,407,136	47,856	.034
		do	35.0	35.0	1934	do	1,265,805	54,761	.043
		do	35.0	35.0	1935[1]	do	729,077	33,789	.046
775	Vegetables, including horseradish, cut, sliced, parched, roasted, reduced to flour, packed in salt, brine, or oil, or prepared, n. s. p. f.	do	35.0	35.0	1929	do	5,861,859	396,180	.068
		do	35.0	35.0	1931	do	9,546,187	674,077	.071
		do	35.0	35.0	1932	do	8,873,980	469,172	.053
		do	35.0	35.0	1933	do	6,006,749	350,077	.058
		do	35.0	35.0	1934	do	6,142,841	471,466	.077
		do	35.0	35.0	1935[1]	do	4,451,639	361,392	.081
779	Rice straw and rice fiber.	Free			1929[4]	Pound			
		½ cent pound.	16.0	16.0	1931	do	217,680	6,784	.031
		do	25.1	25.1	1932	do	217,836	4,331	.020
		do	23.0	23.3	1933	do	262,686	5,707	.022
		do	17.9	19.4	1934	do	1,087,440	30,333	.028
		do	21.0	21.0	1935[1]	do	1,542,140	36,797	.024

[1] 8 months.
[4] Not separately classified.
[29] Prior to 1933 pickled vegetables were included with "Vegetables, including horseradish, cut, sliced, parched, roasted, reduced to flour, packed in salt, brine, or oil or prepared, n. s. p. f."
[30] Including weight of immediate container.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					
Japan			Proportion from Japan		Comments
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
319,576	$58,229	$0.182	4.1	3.3	Imports consist of canned mushrooms of the cultivated type. The bulk of imports come from France, Japan being a minor source. It is estimated that domestic production amounted to about 1,000,000 pounds, drained
91,695	28,182	.307	3.3	3.7	
94,321	15,612	.166	4.8	3.3	weight, in 1930 and increased to between 3 and 3½ million pounds, drained weight, in 1934.
95,221	17,579	.185	6.7	4.9	
84,960	17,972	.212	10.4	7.1	
49,244	10,830	.220	13.6	9.3	
96,769	173,033	1.79	27.4	21.6	The bulk of imports, including those from Japan, are field peas used for "splitting" for food. Imports are equivalent to 3 or 4 percent of domestic production (quantity). The domestic production of dried peas amounts to 4 or 5 million bushels annually, principally garden peas used for planting. Exports, about half as large in volume as imports, consist principally of garden peas. Mexico was the principal source of imports in 1934.
10,885	16,836	1.55	9.6	7.3	
5,026	10,145	2.02	3.8	4.1	
7,309	13,783	1.89	4.2	4.2	
17,363	30,875	1.78	12.4	7.6	
11,557	17,659	1.53	14.5	8.8	
8,591,996	472,925	.055	67.0	55.3	Imports from Japan consist chiefly of thin soy sauces of types not produced in the United States and appear to be consumed chiefly by orientals residing in the United States. Forty percent of imports in 1934 entered at Hawaii.
7,599,659	373,460	.049	69.1	66.8	
8,461,569	243,167	.029	73.3	56.3	
8,527,601	228,684	.027	74.5	62.3	
8,163,539	227,113	.028	69.6	56.1	
4,729,125	149,594	.032	68.3	56.0	
(29)	(29)				Imports from Japan consist of a variety of Japanese specialties entered chiefly at Hawaii and on the west coast, consumed chiefly by orientals residing in the United States or served in oriental restaurants. Most of these specialties are entered and sold under Japanese names. The Netherlands, Poland-Danzig, Italy, and Japan, in the order named, were the principal sources of imports of pickled vegetables in 1934.
(29)	(29)				
(29)	(29)				
441,892	14,439	.033	12.7	8.7	
30 318,511	12,591	.040	12.3	7.8	
227,549	7,354	.032	14.1	6.9	
612,925	40,355	.066	67.8	58.2	Imports consist chiefly of soybean products, soybean curd being the base of most of these preparations. They are consumed chiefly by orientals residing in the United States. There is no domestic production of such products.
494,167	27,007	.055	64.7	63.9	
713,854	23,067	.032	74.4	66.3	
1,086,210	31,215	.029	77.2	65.2	
894,479	30,806	.034	70.7	56.3	
563,109	19,804	.035	77.2	58.6	
1,336,365	114,902	.086	22.8	29.0	Imports from Japan consist largely of oriental specialties which are consumed chiefly by orientals residing in the United States. Most of the imports are invoiced under Japanese names and thus difficult to identify; a few recognizable by name are bamboo sprouts, gourds, onions, bean flour, kelp, and bean sprouts. Imports enter chiefly in Hawaii and through Pacific coast ports. Foodstuffs comparable to those imported from Japan are not produced domestically. Hong Kong, Italy, and China are important sources of imports of vegetables under this classification. (NOTE.—From June 18, 1930, through Dec. 31, 1932, this classification included pickled vegetables.)
3,023,130	225,996	.075	31.7	33.5	
3,748,058	154,698	.041	42.2	33.0	
3,232,888	147,187	.046	53.8	42.0	
2,704,501	161,019	.060	44.0	34.2	
1,947,446	112,317	.058	43.7	31.1	
217,680	6,784	.031	100.0	100.0	Imported rice straw and fiber is used in the manufacture of brooms, and competes with domestically produced broomcorn rather than domestic rice straw which is rendered unfit for use by mechanical threshing. Rice straw and fiber is an inferior substitute for broomcorn, the quantity used as a filler in the manufacture of broomcorn brooms depending upon the price of broomcorn. Increased imports in 1934 and 1935 are due to the shortage and high price of domestic broomcorn. In addition to the duty, imports pay a charge for sterilization ranging from $10 to $15 per ton; the invoice value of imports averaged $48 per short ton in 1935 (8 months).
217,836	4,331	.020	100.0	100.0	
256,074	5,483	.021	97.5	96.1	
972,000	25,035	.026	89.4	82.5	
1,542,140	36,797	.024	100.0	100.0	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
781	Capsicum or red or cayenne pepper (including chili), unground.	2 cents pound.	15.0	39.8	1929	Pounds	3,140,942	$417,355	$0.133
		5 cents pound.	66.0	75.3	1931	do	1,038,665	78,453	.076
		do	63.1	64.2	1932	do	1,112,269	88,172	.079
		do	71.9	73.5	1933	do	1,342,986	93,344	.070
		do	64.7	76.7	1934	do	1,668,909	128,884	.077
		do	75.5	87.7	1935[1]	do	1,195,194	79,088	.066
804	Still wine, including ginger wine, vermuth and rice wine, or sake, and similar beverages, n. s. p. f., containing not more than 24-percent alcohol.	$1.25 gallon	57.8	-----	1929	Gallon	32,207	69,707	2.16
		do	53.0	-----	1931	do	23,987	57,089	2.38
		do	63.8	17.0	1932	do	29,505	57,788	1.96
		do	42.6	150.6	1933	do	723,288	2,122,070	2.93
		do	42.4	150.3	1934	do	3,462,184	10,210,259	2.95
		do	80.1	149.0	1935[1]	do	1,355,746	2,113,465	1.56
904	Countable cotton cloth	Various	30.7	(2)	1929	Square yard.	55,954,932	15,055,889	.269
		do	34.9	(2)	1931	do	33,873,934	7,087,102	.209
		do	37.3	(2)	1932	do	28,221,018	4,219,842	.150
		do	38.5	(2)	1933	do	40,129,442	6,024,605	.150
		do	37.6	26.9	1934	do	40,493,622	6,433,559	.159
		do	(2)	(2)	1935[1]	do	42,615,046	4,520,499	.106

[1] 8 months.
[2] Less than 1/10 of 1 percent.
[3] Not computed.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					
Japan			Proportion from Japan		Comments
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
1,378,269	$173,199	$0.126	43.9	41.5	Domestic production is estimated at approximately 5,000,000 pounds annually. Imports supply between 20 and 30 percent of domestic consumption. In general the price of imported pepper is higher than that of the domestic product. Mexico and British East Africa are also important sources of imports.
590,446	39,206	.066	56.8	50.0	
691,991	53,890	.078	62.2	61.1	
916,221	62,317	.068	68.2	66.8	
858,631	55,978	.065	51.4	43.4	
686,376	39,136	.057	57.4	49.5	
3	22	7.33	(1)	(1)	Imports from Japan consist almost wholly of sake (made from rice), the principal alcoholic beverage of Japan. While it is made from grain, like beer, it has about the same alcoholic content as wine. Imports of sake are wholly from Japan and are consumed almost entirely by persons of Japanese origin, principally in California and Hawaii. Domestic production of sake is very small, consumption requirements being supplied largely by imports. France, Italy, Spain, and Germany are the principal sources of wine imported under this classification.
5,111	4,241	.830	.7	.2	
246,866	205,323	.832	7.1	2.0	
57,274	48,030	.839	4.2	2.3	
1,216,884	188,568	.155	2.2	1.3	Imports for consumption of countable cotton cloths averaged, in square yards per month, 6,385,000 under the act of 1913, 8,608,000 under the act of 1922, 2,766,000 under the act of 1930 to the end of the calendar year 1934, and 5,186,000 in the first 9 months of 1935. In years prior to 1931 the United Kingdom supplied about ¾ of the total imports; its shipments were mostly fine or special cloths fairly high in price. In 1931-34 Switzerland was the main source, supplying mostly a fine-yarn, high-priced specialty known as permanent-finish organdie. In the first 9 months of 1935 (also in December of 1934) Japan was the main source, supplying mostly medium-fine staples, particularly white shirtings, also dyed shirtings and smaller amounts of ginghams and other fabrics. Shirting is a trade term for plain-woven cotton cloths just above the print-cloth range (28s to 40s). The Japanese white shirtings, made of 40s to 46s yarns, are lighter in weight than domestic bleached print cloths but for use in underwear, nightgowns, and handkerchiefs the 2 are competitive; the Japanese cloths have been selling on the American market at about ¾ to 1 cent per yard less than the heavier domestic bleached print cloths. Shipments by the Japanese of cloth coarser and finer than those mentioned have not been very successful, either because of the price being too high or the goods not being suitable to American requirements. Of 38,994,524 square yards received from Japan in the first 9 months of 1935, only 27,214,063 square yards were entered for consumption; the large stocks remaining in bonded warehouses indicate that the demand for Japanese cotton cloths was less than that anticipated by the importers.
770,208	106,341	.138	2.3	1.5	
789,244	56,691	.072	2.8	1.3	
1,115,713	78,508	.070	2.8	1.3	
7,286,517	363,043	.050	18.0	5.6	
24,961,977	1,213,200	.049	58.6	26.8	
					Although cotton cloths imported in 1935 were not abnormal in quantity they have been very low in price. This fact has given rise to various official investigations looking toward restrictions on imports. An investigation instituted under sec. 3 (e) of the N. I. R. A. was cut short by the Supreme Court decision of May 1935, holding parts of that act unconstitutional. An investigation under sec. 336 of the Tariff Act of 1930 is now in progress. A Cabinet committee appointed by the President to investigate conditions in the cotton textile industry included in its study the effect of recent imports and issued a report on Aug. 20, 1935 (S. Doc. 126, 74th Cong., 1st sess.) making a recommendation, among others, as regards imports. Official discussions are now in progress between the United States and Japanese Governments looking toward some voluntary limitation of Japanese exports of cotton cloths to the United States.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
909	Cotton velveteens, plain back, in the piece, cut or uncut.	50 percent			1929 [4]				
		62½ percent			1931 [4]				
		do			1932 [4]				
		31¼ percent [32]	31.25	31.25	1933	Square yard.	2,081	$1,131	$0.543
		do	31.25	31.25	1934	do	101,805	25,869	.254
		do	31.25	31.25	1935 [1]	do	778,112	117,249	.151
911	Cotton quilts or bedspreads, not jacquard-figured.	25 percent			1929 [4]				
		do	25.0	25.0	1931	Number	136,281	134,430	.986
		do	25.0	25.0	1932	do	104,087	76,114	.731
		do	25.0	25.0	1933	do	136,581	78,461	.574
		do	25.0	25.0	1934	do	200,812	116,283	.579
		do	25.0	25.0	1935 [1]	do	182,607	97,988	.537
911	Table and bureau covers, centerpieces, runners, scarfs, napkins, and doilies, of plain woven cotton cloth, n. s. p. f.	30 percent	30.0	30.0	1929			313,032	
		do	30.0	30.0	1931			187,600	
		do	30.0	30.0	1932			141,369	
		do	30.0	30.0	1933			508,199	
		do	30.0	30.0	1934			524,461	
		do	30.0	30.0	1935 [1]			410,706	
915	Cotton gloves and mittens, finished or unfinished, of fabric knit on a warp-knitting machine or made of woven fabric.	Various	67.8	51.1	1929	Dozen pairs.	1,986,972	5,962,551	3.00
		25 or 60 percent.	60.0	33.4	1931	do	2,486,894	6,946,082	2.79
		do	60.0	25.0	1932	do	2,274,456	4,526,593	1.99
		do	59.4		1933	do	2,763,027	5,223,922	1.89
		do	50.4	59.0	1934	do	2,278,296	5,149,541	2.26
		do	35.3	33.0	1935 [1]	do	1,638,699	4,401,259	2.69

[1] 8 months.

[4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
					Imports, almost exclusively from Japan in 1935, are low-priced, plain-back cotton velveteens which are used principally by manufacturers of linings for boxes and cases and for such wearing articles as slippers which expose only small areas of the fabric. (Imports of twill-back cotton velveteen are small.) The imported velveteens sell wholesale at prices ranging from 20 to 35 cents per yard. The domestic plain-back velveteens are considerably higher priced than the imported, the wholesale prices ranging from 60 to 72 cents per yard, and are of such good quality as to be readily adapted to the making of dresses as well as of slippers, and of linings for boxes and cases. Domestic production in 1932, the last year for which data are available, amounted to 1,136,971 square yards, of which half was plain back and half twill back. This production represented less than 20 percent of the production in 1929. Prior to 1934 Germany and the United Kingdom were the principal sources of imports and they supplied high-quality products. As a result of a cost-production investigation under sec. 336 of the Tariff Act of 1930, the duty on plain-back cotton velveteens was reduced by 50 percent in 1933.
73,128	$14,099	$0.193	71.8	54.5	
773,310	114,959	.149	99.4	98.0	
4,009	1,430	.357	2.9	1.1	British India is the source of the larger part of imports under this classification, supplying chiefly prints known as India prints. Imports from Japan are also single-cloth prints, many of the India-print type. Domestic production of cotton bedspreads and quilts of single-woven fabric (crochet, dimity, ripplette, etc.) amounted to $2,255,579 in 1933; these included some jacquard-figured cloths, but the bulk were plain. In the same year production of double-woven cotton bedspreads and quilts (chiefly jacquard figured) amounted to $1,944,422. India prints are not produced in the United States.
333	247	.742	.3	.3	
6,043	4,479	.741	4.4	5.7	
46,605	26,340	.565	23.2	22.7	
34,066	15,958	.468	18.7	16.3	
	66,935			21.4	Imports from Japan consist chiefly of "Japanese blue prints" made of coarse sheeting, stencil dyed in indigo, and "India prints" in multi-colored oriental designs with smaller amounts of yarn-dyed fabrics. Prints of these types are not produced in the United States. Imports from the Netherlands, the principal source of imports under this classification in 1934, and other European countries, consist of high-grade machine or hand-printed articles. Imports from both Japan and Europe are specialties, supplying only a small portion of domestic consumption. Domestic production is known to be large but statistics are not available. The increase in imports in 1933 and after is due chiefly to the greater use of table covers and napkins in tap rooms, taverns, and restaurants since the repeal of prohibition.
	64,081			34.2	
	42,848			30.3	
	103,930			20.5	
	162,539			31.0	
	230,007			56.0	
4,634	3,791	.818	.2	.1	Cotton "warp-knit" and "woven" fabric gloves must be considered together because imports of the latter, including those from Japan, are now practically all warp-knit fabric gloves made with woven cuffs which enter at the 25-percent rate of duty. In 1933, 99 percent of combined imports of warp-knit and woven gloves were warp-knit and 1 percent were woven; in 8 months of 1935, 31 percent of the total were warp-knit and 69 percent were "woven", most of these being warp-knit with woven cuffs. Imports from Japan in 1935 were largely of the latter type. Imports are largely women's dress gloves. The Japanese gloves (mesh and sueded) are inferior in quality and low in price, fitting into chain store price structures. They represent a small but increasing proportion of the total. Germany, producing a superior sueded-finish glove regularly has supplied the larger part of domestic consumption of warp-knit gloves. In 1934 and 1935, however, various factors have resulted in a decline in imports from Germany. At the same time domestic production of dress fabric gloves has increased largely, there having been a development away from sueded fabric to fabric of varied stitch. No statistics for domestic production are available.
3,984	1,878	.471	.2	(32)	
440	130	.295	(32)	(32)	
33,632	24,347	.724	1.5	.5	
58,142	57,790	.994	3.5	1.3	

[32] Rate changed by presidential proclamation, effective July 24, 1933.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Imports for consumption		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
916	Cotton hose and half-hose, selvedged, fashioned, seamless or mock-seamed, made by knitting machines, or knit by hand.	50 percent	50.0	50.0	1929	Dozen pairs	717,795	$2,146,724	$2.99
		do	50.0	50.0	1931	do	520,888	1,363,882	2.62
		do	50.0	50.0	1932	do	430,872	691,559	1.60
		do	50.0	50.0	1933	do	426,004	535,464	1.26
		do	50.0	50.0	1934	do	430,463	428,769	.996
		do	50.0	50.0	1935 [1]	do	366,614	249,397	.680
917	Cotton knit or crocheted underwear, not embroidered.	45 percent			1929 [4]				
		do	45.0	45.0	1931			65,994	
		do	45.0	45.0	1932			47,761	
		do	45.0	45.0	1933			73,577	
		do	45.0	45.0	1934			87,712	
		do	45.0	45.0	1935 [1]			65,771	
917	Cotton knit or crocheted outerwear and articles, n. s. p. f., not embroidered.	do			1929 [4]				
		do	45.0	45.0	1931			104,320	
		do	45.0	45.0	1932			99,108	
		do	45.0	45.0	1933			122,544	
		do	45.0	45.0	1934			242,605	
		do	45.0	45.0	1935 [1]			342,111	
918	Handkerchiefs and mufflers, wholly of cotton, hemmed or hemstitched	Various	48.5		1929	Pound	200,286	619,264	3.09
		do	52.3	[3]	1931	do	93,254	239,443	2.57
		do	52.5	[3]	1932	do	66,647	128,196	1.92
		do	51.1	[3]	1933	Dozen	6,970,254	170,763	.245
		do	44.4	39.9	1934	do	1,157,091	192,785	.167
		do	[3]	[3]	1935 [1]	do	1,912,501	224,197	.117
919	Cotton wearing apparel, n. s. p. f., not knit or crocheted.	35 percent	35.0	35.0	1929	Number	6,790	16,081	2.37
			35.0	35.0				996,806	
		37½ percent	37.5	37.5	1931			344,257	
		do	37.5	37.5	1932			152,995	
		do	37.5	37.5	1933			216,699	
		do	37.5	37.5	1934			226,640	
		do	37.5	37.5	1935 [1]			197,881	

[1] 8 months.
[3] Less than 1/10 of 1 percent.
[4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
159	$537	$3.38	(2)	(2)	Imports from Japan consist almost wholly of men's seamless half-hose, the quality of which has improved considerably in recent years. Prior to 1933, Germany supplied over 85 percent of the total quantity of imports in this classification but since that date imports from Germany have declined drastically; this decrease cannot be related to the large increase in imports from Japan, however, as imports from Germany were high-priced, full-fashioned hose. Domestic production of men's cotton seamless half-hose in 1933 amounted to 12,455,518 dozen pairs, valued at $10,891,348, the average unit value being $0.87 per dozen pairs. Total domestic production of all-cotton hosiery in 1933 amounted to 29,203,334 dozen pairs, valued at $31,021,195.
21,637	7,259	.355	4.2	0.5	
27,825	8,030	.289	6.5	1.2	
84,681	25,095	.296	19.9	4.7	
257,417	98,008	.381	59.8	22.9	
296,866	102,419	.357	78.2	41.1	
----------	8,163	----------	------	12.4	Imports from Japan consist largely of men's and boys' athletic shirts. At first unacceptable to American consumers, Japanese underwear has been sufficiently improved to meet some demand for cheaper qualities. Domestic production of cotton knit underwear in 1933 smounted to $55,317,810 (preliminary figures); imports, therefore, supplied less than one-fifth of 1 percent of domestic consumption.
----------	15,836	----------	------	33.2	
----------	39,102	----------	------	53.1	
----------	50,208	----------	------	57.2	
----------	41,906	----------	------	63.7	
----------	5,870	----------	------	5.6	Germany, the United Kingdom, Czechoslovakia, and Japan, in the order named, were the principal sources of imports in 1934. Although about one-half of the total imports in 1934 consisted of string gloves, imports from Japan consisted largely of sweaters of inferior quality. Probably some improvement in quality accounts for increased imports in 1935. Statistics of domestic production of cotton knit outerwear are not available, but such production probably amounts to several millions of dollars annually.
----------	14,915	----------	------	15.0	
----------	23,285	----------	------	19.0	
----------	29,494	----------	------	12.2	
----------	62,858	----------	------	18.4	
(22)	(22)	----------	------	------	The bulk of the imported cotton handkerchiefs other than those ornamented with lace, embroidery, etc. (which are dutiable in paragraph 1529–a) is dutiable in paragraph 918 at the rates provided for cotton cloths in paragraph 904 plus 10 percent ad valorem. Imports may be bleached, printed, or colored. Prior to 1934 imports consisted chiefly of the higher-priced grades, made from medium-fine and fine-count cloths, principally from the United Kingdom. Imports from Japan, beginning in substantial quantities in 1934, are of the same general quality and sold in the same low-priced ranges as the bulk of domestic production which, although large (possibly 15 to 20 million dozen) is not separately recorded. The imports from Japan are made mostly from cotton cloths averaging about 42s in yarn count. Imports of these handkerchiefs induced domestic handkerchief manufacturers to import Japanese cotton cloth for their production in order to combat the competition from imported Japanese cotton handkerchiefs. The increased imports of cotton cloth have given rise to several investigations looking toward restrictions on imports (see comment on paragraph 904).
197	292	1.48	.2	.1	
174	89	.511	.3	.1	
11,828	1,369	.116	1.7	.8	
779,186	79,299	.102	67.3	41.1	
1,716,813	162,274	.095	89.8	72.4	
----------	264,263	----------	------	26.5	This classification covers all cotton wearing apparel except shirts, collars and cuffs, knit goods, garters, suspenders, and other small wares, apparel ornamented with lace, embroidery, etc., and corsets and similar body-supporting garments. It includes various types of cotton clothing such as pants and knickers, dresses, underwear, sleeping garments, and children's suits. Statistics for domestic production are not available but the output is known to be large, amounting to several hundreds of millions of dollars annually. Exports of cotton wearing apparel n. s. p. f. amounted to $1,613,407 in 1934. Sources of imports other than Japan are the United Kingdom, France, and Germany.
----------	91,874	----------	------	26.7	
----------	32,022	----------	------	20.9	
----------	39,260	----------	------	18.1	
----------	79,209	----------	------	34.9	
----------	89,780	----------	------	45.4	

[2] Not computed.
[22] Not readily available, but negligible.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
921	"Hit-and-miss" rag rugs of cotton.	35 percent [34]	35.0	35.0	1929	Square yard.	2,019,548	$1,139,793	$0.564
		75 percent	75.0	75.0	1931	do	3,582,974	433,111	.121
		do	75.0	75.0	1932	do	4,264,029	278,296	.065
		do	75.0	75.0	1933	do	3,988,663	259,336	.065
		do	75.0	75.0	1934	do	3,749,802	272,966	.073
		do	75.0	75.0	1935 [1]	do	3,409,723	250,287	.073
921	Cotton chenille rugs	35 percent			1929 [4]				
		40 percent	40.0	40.0	1931	Square yard.	325,009	134,387	.413
		do	40.0	40.0	1932	do	470,129	110,608	.235
		do	40.0	40.0	1933	do	1,074,349	260,475	.242
		do	40.0	40.0	1934	do	867,558	283,471	.327
		40 percent + fee of 15 cents sq. yd. [35]	86.8	87.8	1934	do	317,390	101,699	.320
		do	95.2	95.6	1935 [1]	do	383,549	104,227	.272
		40 percent [35]	40.0	40.0	1935 [1]	do	187,184	54,304	.290
921	Floor coverings of grass or rice straw, in chief value of cotton.	do [37]			1929 [4]				
		do			1931 [4]				
		do			1932 [4]				
		do			1933 [4]				
		35 percent	35.0	35.0	1934	Square yard.	[35] 890,199	[35] 68,364	.077
		do	35.0	35.0	1935 [1]	do	4,207,462	333,080	.079

[1] 8 months.
[4] Not separately classified.
[34] On American selling price.
[35] Fee attached by presidential action, effective June 5, 1934, under sec. 3 (e) of the National Recovery Act.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
2,019,548	$1,139,793	$0.564	100.0	100.0	The hit-and-miss rag rug, made of strips of colored cotton rags interwoven with a small amount of cotton yarn, is one of the cheapest types of textile floor coverings. Japan supplies the bulk, apparently over 90 percent, of the American consumption of rugs of this type. Data are not available as to the total domestic output but it is known that the bulk is produced in homes and institutions and that mill production, which amounted to 340,000 square yards in 1931, is now very small. The Japanese hit-and-miss rag rugs compete not only with domestic rugs of a similar type, but also with the lower grades of cotton chenille-and-roving rugs.
3,582,974	433,111	.121	100.0	100.0	
4,264,009	278,276	.065	100.0	100.0	
3,988,663	259,336	.065	100.0	100.0	
3,749,798	272,960	.073	100.0	100.0	
3,409,723	250,287	.073	100.0	100.0	Imports of cotton hit-and-miss rag rugs from Japan into the United States were restricted by agreement, effective June 1, 1934, to 3,250,000 square yards per annum; by a revision in May 1935, this yearly quota was increased to 3,550,000 square yards.
317,089	119,224	.376	97.6	88.7	Cotton chenille rugs include "all-chenille" rugs and the cheaper chenille-and-roving rugs. Returns of domestic manufacturers of chenille rugs showed an average annual production of over 2 million square yards for the years 1929 to 1933, inclusive. Partial returns indicate that production for 1934 was about half this amount but with an increase of about 25 percent during the first half of 1935.
463,102	96,897	.209	98.5	87.6	
1,071,551	254,457	.237	99.7	97.7	
865,869	279,830	.323	99.8	98.7	
316,274	99,248	.314	99.6	97.6	
383,198	103,292	.270	99.9	99.1	Under authority of section 3 (e), of the N. I. R. A., a fee of 15 cents per square yard, in addition to the 40 percent ad valorem duty, was imposed by presidential proclamation, effective June 5, 1934. By similar action this fee was abolished June 15, 1935.
186,943	53,661	.287	99.9	98.8	
					A voluntary restriction by agreement with Japan on imports of cotton chenille rugs from Japan limited entries to 650,000 square yards per annum, effective June 1, 1934; by a revision of May 1935 this yearly quota was increased to 750,000 square yards.
					Imports from Japan consist of rice-straw rugs which compete with domestic wire-grass rugs. Domestic production of grass rugs has decreased almost steadily since 1919; in that year the production of 4 companies amounted to 3,779,570 square yards valued at $3,504,563. In 1928 total domestic production was 1,143,335 square yards. Production has decreased since that time and only 2 companies were in operation in 1932. The prices of imported rice-straw rugs have at all times been materially lower than domestic wire-grass rugs, partly as a result of their inferiority in quality and durability. Prior to the decision of the United States Customs Court in January 1934 rice-straw rugs, in chief value of cotton, were entered under paragraph 1021 as "floor coverings not specially provided for" at 40 percent ad valorem.
[36] 890,199	[36] 68,364	.077	100.0	100.0	
4,207,462	333,080	.079	100.0	100.0	

[36] Fee abolished by presidential proclamation June 15, 1935.
[37] Prior to Jan. 1, 1934, were entered under paragraph 1021 as "Floor coverings, n. s. p. f."
[38] From June 5 to Dec. 31, inclusive; from Jan. 1 to June 4 entered as "Other carpets, carpeting, mats, and rugs."

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
921	Floor coverings of cotton, other than "hit-and-miss" rag rugs, chenille rugs, imitation oriental rugs, and grass and rice-straw rugs.	35 percent	35.0	35.0	1929	Square yard.	[39] 2,911,272	[39] $1,452,206	$0.499
		do	35.0	35.0	1931	do	[39] 2,089,565	[39] 592,562	.284
		do	35.0	35.0	1932	do	[39] 2,283,004	[39] 384,655	.168
		do	35.0	35.0	1933	do	[39] 4,076,339	[39] 594,519	.146
		do	35.0	35.0	1934[40]	do	[39] 4,093,530	[39] 514,413	.126
		35 percent plus fee of 5 cents square yard.[41]	71.1	71.1	1934[42]	do	[39] 661,230	[39] 91,523	.138
		35 percent plus 20 percent.[41]	55.0	55.0	1934[42]	do	[39] 66,733	[39] 67,945	1.02
		35 percent plus fee of 5 cents square yard.[41]	69.9	69.9	1935[42]	do	[39] 1,168,073	[39] 167,423	.143
		35 percent plus 20 percent.[41]	55.0	55.0	1935[42]	do	[39] 78,699	[39] 55,458	.705
		35 percent [44]	35.0	35.0	1935[42]	do	[39] 757,149	[39] 132,188	.175
922	Rags of cotton, including wiping rags, except for paper making.	20 percent			1929[4]				
		3 cents pound.	67.0	68.0	1931	Pound	15,895,800	709,442	.045
		do	108.3	109.1	1932	do	10,303,162	285,532	.028
		do	100.7	100.7	1933	do	15,432,369	459,894	.030
		do	72.3	72.3	1934	do	17,488,156	725,206	.041
		do	70.2	70.4	1935[1]	do	16,256,865	694,656	.043
923	Friction tape of cotton.[46]	40 percent			1929[4]				
		do			1931[4]				
		do			1932[4]				
		do			1933[4]				
		do	40.0	40.0	1934	Pound	177,002	22,820	.129
		do	40.0	40.0	1935[1]	do	290,130	16,097	.055
923	Cotton fish netting [47]	do			1929[4]				
		do			1931[4]				
		do			1932[4]				
		do	40.0	40.0	1933	Pound	172,106	46,750	.272
		do	40.0	40.0	1934	do	337,531	123,701	.366
		do	40.0	40.0	1935[1]	do	266,827	92,510	.347

[1] 8 months.
[4] Not separately classified.
[39] Imports of "other carpets, carpeting, mats, and rugs", from Belgium, France, and Italy are assumed to be oriental rugs, and are not included.
[40] From Jan. 1 to June 4, inclusive. Rugs of grass or rice straw were included in this classification during these months of 1934.
[41] Fee attached by presidential action, effective June 4, 1934, under sec. 3 (e) of the National Recovery Act, was 20 percent ad valorem but not less than 5 cents per square yard.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					
Japan			Proportion from Japan		Comments
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
2,179,355	$535,831	$0.246	74.9	36.9	Imports from Japan consist mainly of plain and plaid rag rugs (other than hit-and-miss), Sanshu-yarn rugs, and smaller amounts of cotton hooked rugs. Domestic production of these cotton rugs consists mainly of hooked, tufted, and plain and plaid rag rugs, with competition especially keen in the rag-rug group. Returns from manufacturers indicate that mill production in the United States declined from 813,000 square yards in 1929 to about 350,000 square yards for each of the years 1933 and 1934. The first half of 1935 shows an increase of about 20 percent over the same period of 1934. With the exception of hooked rugs from Canada, Japan is practically the only source of imports.
1,850,472	365,235	.197	88.6	61.6	
2,065,198	243,163	.118	90.5	63.2	
3,994,695	535,871	.134	98.0	90.1	
4,059,199	490,169	.121	99.2	95.3	
660,937	91,459	.138	99.9	99.9	
35,478	43,899	1.24	53.2	64.6	
1,168,073	167,423	.143	100.0	100.0	It was not until the imposition of fees, effective June 5, 1934, that there was any statistical subdivision of imports listed as "Other cotton rugs." After June 5, 1934, there were shown separately the higher-priced rugs, such as hooked rugs, which paid an ad valorem fee of 20 percent, and the lower-priced rugs (valued at 25 cents per square yard), such as Sanshu, which paid a specific fee of 5 cents per square yard. These fees were abolished June 15, 1935. Under agreement with Japan restriction on imports limited the annual quota of cotton rugs other than hit-and-miss and chenille rugs to 4,070,000 square yards, effective June 1, 1934, and to 3,250,000 square yards by a revision of limitations in May 1935.
40,367	35,403	.877	51.3	63.8	
751,274	127,207	.169	99.2	96.3	
15,183,287	669,388	.044	95.5	94.4	This classification covers (*a*) wiping rags, viz, old clothing usually processed by washing or bleaching, and then torn or cut into rags, and (*b*) rags too small for wiping purposes but suitable for remanufacture into "cotton shoddy." Imports consist principally of rags for wiping purposes. Domestic production in 1931 was valued at $5,404,135; exports in 1934 were 20,000,000 pounds, valued at $930,800, exceeding imports. Exports consist largely of rags suitable for remanufacture.
10,182,284	279,979	.027	98.8	98.1	
15,398,802	458,562	.030	99.8	99.7	
17,161,488	711,932	.041	98.1	98.2	
16,045,518	683,307	.043	98.7	98.4	
176,102	22,491	.128	99.5	98.6	Friction tape, more commonly known as insulating tape, is made by impregnating low-grade cotton print cloth with oil, pine, gum, rubber, or asphalt compound. Three grades are made in Japan, but only the lowest grade is exported, and at prices higher than those at which it is offered for sale, in limited quantities, in Japan. The unit value of United States imports in 1935 (8 months) averaged 5½ cents per pound. Domestic production, consisting chiefly of high-grade tape, was 11,439,000 pounds in 1933, valued at $2,134,000, the unit value being 19.2 cents per pound. Exports in 1934 were 549,532 pounds, valued at $147,532, considerably exceeding imports.
290,130	16,097	.055	100.0	100.0	
129,071	28,017	.217	75.0	59.9	Domestic production of cotton and linen fish netting in 1934 (over 90 percent of which was cotton netting) amounted to 2,004,804 pounds. 90 percent of production is by 4 companies. Domestic net is considerably higher in price than the imported product. Substantial imports from Japan began only late in the year 1931 concomitantly with drastic declines in the prices received by the fishermen for the types of fish caught in nets. The price of fish fell much more after 1929 than did prices of domestic netting. The cost of netting is estimated at from 5 to 10 percent of the total sales value of the fish caught with nets.
211,603	61,051	.289	62.7	49.4	
216,717	65,819	.304	81.2	71.1	

[43] From June 5 to Dec. 31, inclusive.
[43] From Jan. 1 to June 14, inclusive.
[44] Fee abolished by presidential proclamation June 15, 1935.
[45] From June 15 to Aug. 31, inclusive.
[46] Prior to 1934 included with "Articles and manufactures of cotton, n. s. p. f."
[47] Prior to 1933 included with "Articles and manufactures of cotton, n. s. p. f."

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
923	Articles and manufactures of cotton, n. s. p. f.	40 percent	40.0	40.0	1929 [48]			$2,737,714	
		do	40.0	40.0	1931 [48]			931,250	
		do	40.0	40.0	1932 [48]			805,968	
		do	40.0	40.0	1933 [49]			827,475	
		do	40.0	40.0	1934			1,009,438	
		do	40.0	40.0	1935 [1]			763,774	
1010	Woven fabrics, n. s. p. f. of hemp or ramie.	do	40.0	40.0	1929	Pound	13,724	12,501	$0.911
		do	40.0	40.0	1931	do	18,203	13,235	.727
		do	40.0	40.0	1932	do	7,454	3,593	.482
		do	40.0	40.0	1933	do	10,803	4,505	.417
		do	40.0	40.0	1934	do	35,593	17,966	.505
		do	40.0	40.0	1935 [50]	do	18,363	9,209	.501
		30 percent [51]	30.0		1935 [52]	do	3,625	1,211	.334
1021	Common China, Japan, and India straw matting and floor coverings made therefrom.	3 cents square yard.	24.5	23.2	1929	Square yard.	1,408,008	172,566	.123
		do	39.0	37.1	1931	do	1,102,243	84,043	.076
		do	42.3	57.2	1932	do	1,052,520	74,663	.071
		do	52.2	57.3	1933	do	792,246	45,507	.057
		do	48.7	50.6	1934	do	1,961,384	120,788	.062
		do	54.4	57.5	1935 [1]	do	2,455,505	135,400	.055
1021	Floor coverings, n. s. p. f.	40 percent	40.0	40.0	1929	do	3,298,261	989,581	.300
		do	40.0	40.0	1931	do	2,413,514	454,904	.188
		do	40.0	40.0	1932	do	3,280,791	334,289	.102
		do	40.0	40.0	1933	do	3,738,855	299,236	.080
		do	40.0	40.0	1934 [53]	do	1,104,463	233,975	.212
		do	40.0	40.0	1935 [1 53]	do	868,615	192,596	.222
1114	Gloves and mittens of wool, knit or crocheted, valued not over $1.75 per dozen pairs.	36 cents pound and 35 percent.	56.7		1929	Dozen pair.	80,286	131,911	1.64
		40 cents pound and 35 percent.	63.0		1931	do	75,484	116,816	1.55
		do	62.0	80.7	1932	do	39,432	62,818	1.59
		do	61.8		1933	do	23,633	34,701	1.47
		do	66.5	66.7	1934	do	30,566	34,873	1.14
		do	71.0	71.1	1935 [1]	do	180,049	191,107	1.06

[1] 8 months.
[2] Less than 1/10 of 1 percent.
[48] Includes cotton friction tape and fish netting.
[49] Includes cotton fish netting.
[50] From Jan. 1, to Apr. 30, inclusive.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
----------	$233,209	----------	------	8.5	The miscellaneous articles imported under this classification are mainly novelty and specialty goods. Little information is available with respect to particular items from Japan. In 1933 hat bands (sweat) and luncheon sets represented approximately 80 percent of the total value from Japan, exclusive of friction tape, which was classified with these articles in that year. The nature of the items shifts greatly from year to year. The rapid drop in imports subsequent to 1929 is caused largely by the transfer in the act of 1930 of men's and boys' cotton-and-wool mixed suitings to pars. 906 and 1122. Available data covering only a small part of the total items showed a domestic production of about $250,000,000 in 1931. The United Kingdom, Austria, and then Japan are the most important sources of imports under this classification.
----------	117,742	----------	------	12.6	
----------	100,890	----------	------	12.5	
----------	115,539	----------	------	14.0	
----------	153,703	----------	------	15.2	
----------	104,796	----------	------	13.7	
30	33	$1.10	0.2	.3	Imports of woven fabrics of true hemp (cannabis sativa) or of ramie are negligible; there is no domestic production. Imports from Japan under this classification are reported to be of pedaline cloth, woven of yarns made with a core of abaca ("manila hemp") fibers wrapped spirally with a strip of cellophane, for use in the manufacture of hats. Pedaline cloth, a substitute for pedaline braid, is of recent American origin; production and imports are both small.
5,738	6,180	1.08	31.5	46.7	
1,831	1,594	.871	24.6	44.4	
1,125	811	.721	10.4	18.0	
30,229	13,979	.462	84.9	77.8	
17,235	8,553	.496	93.9	92.9	
----------	----------	----------	------	------	
724,811	93,567	.129	51.5	54.2	This classification covers straw matting made from a species of matting rush, and woven by hand. There is no production of straw matting in the United States. Imports compete only indirectly with other types of cheap floor coverings (both imported and domestic) for use in the summer months.
390,251	31,562	.081	35.4	37.6	
407,291	21,371	.052	38.7	28.6	
528,644	27,666	.052	66.7	60.8	
1,621,701	96,187	.059	82.7	79.6	
2,222,368	115,906	.052	90.5	85.6	
2,788,864	422,657	.152	84.6	42.7	Statistics for 1934 and 1935 are not comparable with those for previous years, as the bulk of the imported rice-straw rugs were found, late in the year 1933, to be in chief value of cotton, and transferred to par. 921. Imports from Japan remaining in the classification consist chiefly of rush rugs, fiber (paper) rugs, and rice-straw rugs not in chief value of cotton; imports from other countries include felt-base floor coverings, sisal rugs, and mourzouk (coir) rugs. Rush rugs are not manufactured in the United States. Fiber (paper) rugs are produced domestically, but no statistics are available; imports are small absolutely and in relation to domestic production. Rice-straw rugs are not produced in the United States; they compete to some extent with domestic production of wire-grass rugs, the output of which has been decreasing for the past 15 years and is now small. Belgium, United Kingdom, and China are important sources of miscellaneous floor coverings imported under this classification.
2,141,512	258,845	.121	88.7	56.9	
3,022,414	210,243	.070	92.1	62.9	
3,571,664	211,178	.059	95.5	70.6	
651,176	96,663	.148	59.0	41.3	
224,489	57,094	.254	25.8	29.6	
----------	----------	----------	------	------	
----------	----------	----------	------	------	German and Czechoslovakia were the principal sources of imports until 1934. In that year Japan entered the domestic market and at present over 95 percent of the imports come from Japan. Imports from Japan are chiefly lightweight worsted gloves. Imports of woolen (brushed wool) gloves and of woolen and worsted mittens from Japan are small. The domestic production of gloves and mittens in this group amounted in 1934 to approximately 713,000 dozen pairs (151,000 dozen pairs of worsted gloves, 306,000 dozen pairs of woolen (brushed wool) gloves, and 256,000 dozen pairs of mittens).
15	7	.467	(2)	(2)	
----------	----------	----------	------	------	
27,614	31,843	1.15	90.3	91.3	
176,867	186,191	1.05	98.2	97.4	

[1] Rate changed by trade agreement between the United States and Belgium, effective May 1, 1935.
[2] From May 1 to Aug. 31, inclusive.
[3] Statistics for 1934 and 1935 are not comparable with statistics for previous years because of the transfer of rice-straw rugs to par. 921 in January 1934.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1115	Clothing and articles of wearing apparel of wool (except hats and hat bodies) not knit or crocheted, valued not over $4 per pound.	24 cents pound and 40 percent or 30 cents pound and 45 percent.	55.6	56.6	1929	Pound	519,798	$1,359,174	$2.61
		33 cents pound and 45 percent.	59.2	63.0	1931	do	226,494	525,518	2.32
		do	61.2	77.7	1932	do	221,073	450,744	2.04
		do	59.3	76.9	1933	do	285,129	658,652	2.31
		do	58.3	70.6	1934	do	262,971	651,007	2.48
		do	59.7	73.1	1935 [1]	do	197,236	442,591	2.24
1117	Floor coverings of wool, n. s. p. f., including druggets, valued not over 40 cents per square foot.	30 percent			1929 [4]				
		do	30.0	30.0	1931	Square feet.	3,394,660	471,880	.139
		do	30.0	30.0	1932	do	4,437,307	419,564	.095
		do	30.0	30.0	1933	do	5,310,345	512,152	.096
		do	30.0	30.0	1934	do	4,804,101	608,163	.127
		do	30.0	30.0	1935 [1]	do	4,892,397	564,970	.115
1205	Woven fabrics in the piece, except pile, not exceeding 30 inches in width (including umbrella silk or Gloria silk) not jacquard-figured; bleached, printed, or piece-dyed; all silk. [44]	55 percent			1929 [4]				
		60 percent	60.0	60.0	1931	Pound	68,181	349,667	5.13
		do	60.0	60.0	1932	do	51,127	162,260	3.17
		do	60.0	60.0	1933	do	57,429	185,178	3.22
		do	60.0	60.0	1934	do	61,135	212,014	3.47
		do	60.0	60.0	1935 [1]	do	43,999	116,995	2.66
1205	Woven fabrics in the piece, except pile, exceeding 30 inches in width, not jacquard-figured; in the gray; all silk. [44]	55 percent	55.0	55.0	1929	do	2,248,653	6,329,104	2.81
		do	55.0	55.0	1931	do	1,726,691	2,744,964	1.59
		do	55.0	55.0	1932	do	1,070,524	1,174,253	1.10
		do	55.0	55.0	1933	do	1,153,601	1,090,373	.945
		do	55.0	55.0	1934	do	1,062,174	1,062,807	1.00
		do	55.0	55.0	1935 [1]	do	746,952	704,515	.943
1205	Woven fabrics in the piece, except pile, exceeding 30 inches in width, not jacquard-figured; bleached, printed, piece-dyed, or yarn-dyed; all silk. [44]	55 percent			1929 [4]				
		do	55.0	55.0	1931	Pound	746,640	3,037,804	4.10
		do	55.0	55.0	1932	do	260,759	810,014	3.11
		do	55.0	55.0	1933	do	347,737	1,164,203	3.35
		do	55.0	55.0	1934	do	465,217	1,608,545	3.46
		do	55.0	55.0	1935 [1]	do	498,800	1,290,621	2.59

[1] 8 months. [4] Not separately classified. [44] Not including silk mixed with other fibers.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
156,359	$397,192	$2.54	30.1	29.2	Great Britain is the source of the bulk of imports under this classification, supplying chiefly men's and boys' overcoats and spats. Imports from Japan consist chiefly of coolie coats made of lightweight worsted fabrics. Total imports of wool wearing apparel constitute only a small fraction of 1 percent of domestic consumption of wool wearing apparel.
25,603	46,978	1.83	11.3	8.9	
12,533	12,650	1.01	5.7	2.8	
31,735	32,811	1.03	11.1	5.0	
28,435	36,591	1.29	10.8	5.6	
15,197	17,841	1.17	7.7	4.0	
31,390	7,178	.229	.9	1.5	Imports from Japan are wool hooked rugs and that country supplies practically all of the imports of such rugs. Imports have increased rapidly since 1932. Domestic production, rather small before Japanese rugs began to enter the domestic market, is now negligible. Wool hooked rugs from Japan compete to some extent with higher priced domestic looped pile rugs made in hooked-rug designs. British India is the principal source of other floor coverings of wool, n. s. p. f.
15,118	2,739	.181	.3	.7	
221,082	40,469	.183	4.2	7.9	
864,731	186,949	.216	18.0	30.7	
933,553	187,455	.201	19.1	33.2	
35,786	121,611	3.40	52.5	34.8	Imports in this classification in 1934 amounted to 5 percent of the quantity and 8 percent of the value of total imports of broadsilks under par. 1205. Imports from Japan consist largely of all-silk printed and piece-dyed pongee and lesser quantities of Fuji cloth, the latter made of spun-silk yarn. Imports from France, Switzerland, and Italy, all important sources of imports, consist of split-edge floral ribbons, Gloria cloth for umbrella coverings, and cravatings.
34,931	71,333	2.04	68.3	44.0	
38,851	69,888	1.80	67.7	37.7	
40,603	74,014	1.82	66.4	34.9	
30,709	43,398	1.41	69.8	37.1	
1,992,789	5,478,407	2.75	88.6	86.6	This classification includes practically all imports of broad silks in the gray, as imports of gray goods less than 30 inches in width or woven with jacquard patterns are unimportant. Gray goods in 1934 constituted 61.7 percent in quantity and 28.9 percent in value of the total broadsilks imported under par. 1205. Imports of gray goods in 1932, 1933, and 1934 were much lower than in any year under the act of 1922. About ¾ of the imports under this classification consist of genuine pongee-made of reeled tussah silk. Genuine pongee is produced in the United States only sporadically and on a small scale; most of the domestic output in this line is imitation pongee made of yarn spun from tussah or other silk waste and therefore lower in grade and cheaper in price than the genuine pongee. The second most important item is habutae; Japanese exports of this cloth to the United States declined from $7,820,000 in 1921 to $301,000 in 1934. The lighter and medium weights, constituting the bulk of imports, are only indirectly competitive with domestic fabrics of a different construction or material, such as silk mixtures and rayon fabrics; imports of the heavier and more competitive habutae are relatively small. Small quantities of satins enter in this classification, but are lightweight fabrics used for different purposes than heavier domestic satins.
1,223,235	2,069,063	1.69	70.8	75.4	
1,008,490	1,063,780	1.06	94.2	90.6	
1,105,757	965,151	.873	95.9	88.5	
1,024,088	944,234	.922	96.4	88.8	
706,218	631,669	.894	94.5	89.7	
442,854	923,770	2.09	59.8	30.4	Imports in this classification constitute 26.8 percent of the quantity and 43.4 percent of the value of the total imports in 1934 of broadsilks under par. 1205. The bulk of imports from Japan consists of printed and piece-dyed pongees and Fuji cloth (imitation pongees made of spun silk); smaller but substantial quantities of imports from Japan (valued at about $50,000 in 1934) are yarn dyed, mainly satins and other dress fabrics. Domestic production in the pongee line is mainly imitation pongee. (See above.) Domestic satins are heavier in weight and better in quality than those imported from Japan and occupy a different field. Imports under this classification from France, United Kingdom, and Italy, other important sources of supply, consist largely of mousseline de soie, printed chiffons, chiffon crepes, printed foulards, silk poplins, etc.
177,090	248,844	1.41	67.9	30.7	
207,061	328,762	1.59	59.5	28.2	
330,811	620,837	1.88	71.1	38.6	
392,893	732,066	1.86	78.8	56.7	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1205	Woven fabrics in the piece, except pile, exceeding 30 inches in width, jacquard-figured; bleached, printed, or piece-dyed; all silk.[54]	55 percent			1929 [4]				
		65 percent	65.0	65.0	1931	Pound	25,170	$195,099	$7.75
		do	65.0	65.0	1932	do	10,905	61,537	5.64
		do	65.0	65.0	1933	do	16,060	91,106	5.67
		do	65.0	65.0	1934	do	17,739	108,809	6.13
		do	65.0	65.0	1935 [1]	do	13,304	74,657	5.61
1209	Plain silk handkerchiefs and woven mufflers.	55 or 60 percent.	59.7	59.9	1929	Dozen	501,177	1,009,996	2.02
		do	59.3	59.9	1931	do	334,530	391,813	1.17
		do	59.5	59.9	1932	do	181,935	153,500	.844
		do	59.1	60.0	1933	do	323,215	194,121	.601
		do	59.3	59.9	1934	do	371,873	260,075	.699
		do	59.7	59.9	1935 [1]	do	300,036	214,493	.715
1210	Clothing and articles of wearing apparel, n. s. p. f. of silk (except men's shirts) not knit or crocheted, not embroidered or of lace.	60 percent	60.0	60.0	1929			3,512,132	
		65 percent	65.0	65.0	1931			1,252,229	
		do	65.0	65.0	1932			595,834	
		do	65.0	65.0	1933			673,071	
		do	65.0	65.0	1934			890,960	
		do	65.0	65.0	1935 [1]			613,343	
1211	Manufactures wholly or in chief value of silk, n. s. p. f.	60 percent	60.0	60.0	1929			1,110,082	
		65 percent	65.0	65.0	1931			368,280	
		do	65.0	65.0	1932			166,365	
		do	65.0	65.0	1933			167,815	
		do	65.0	65.0	1934			201,163	
		do	65.0	65.0	1936 [1]			126,717	
1302	Waste of rayon or other synthetic textiles, except cellulose acetate.	10 percent	10.0	10.0	1929	Pound	3,900,565	785,181	.201
		do	10.0	10.0	1931	do	1,414,018	136,912	.097
		do	10.0	10.0	1932	do	266,489	34,870	.131
		do	10.0	10.0	1933	do	2,533,809	424,057	.167
		do	10.0	10.0	1934	do	1,281,557	179,081	.140
		do	10.0	10.0	1935 [1]	do	751,176	98,329	.131
1311	Clothing and articles of wearing apparel, n. s. p. f. of rayon and other synthetic textiles, not knit or crocheted.	45 cents pound and 60 percent.			1929 [4]				
		45 cents pound and 65 percent.	82.4	91.7	1931	Pound	59,495	153,905	2.59
		do	85.0	120.0	1932	do	45,538	102,289	2.25
		do	79.5	111.5	1933	do	34,476	106,669	3.09
		do	80.2	105.7	1934	do	31,402	92,841	2.96
		do	82.9	109.2	1935 [1]	do	21,739	54,527	2.50

[1] 8 months.

[4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
953	$4,970	$5.22	3.8	2.5	Imports under this classification consist largely of upholstery and drapery fabrics and novelty dress goods for formal wear. Imports, generally, are novelties in a multiplicity of patterns, the designs of which are seldom repeated for more than a season, and orders of which are limited to a few pieces per pattern. France is the principal and Japan a minor source of imports.
981	2,599	2.65	9.0	4.2	
3,952	9,347	2.37	24.6	10.3	
6,555	21,195	3.23	37.0	19.5	
3,786	10,248	2.71	28.5	13.7	
388,370	458,233	1.18	77.5	45.4	Imports from Japan consist largely of habutae and pongee handkerchiefs of medium and low grades, plain or block printed; high grades are imported principally from France and the United Kingdom. Silk handkerchiefs of medium and high grade are produced incidentally in broad silk factories in the United States; the demand for plain silk handkerchiefs is so variable that the handkerchief industry has never taken the risk of producing them in appreciable quantities. Although no statistics of domestic production are available, indications are that such production is relatively small and that consumption is supplied in large part by imports.
302,410	227,144	.751	90.4	58.0	
170,400	85,488	.502	93.7	55.7	
311,349	110,834	.356	96.3	57.1	
362,740	162,644	.448	97.5	62.5	
294,261	163,735	.556	98.1	76.3	
----------	844,614	----------	------	24.0	Japanese export statistics indicate that United States imports from Japan in this classification are predominantly kimonos, with lesser quantities of shawls, underwear, pajamas, etc. These articles are usually made of printed or brocaded silk and many of them are distinctively Oriental in design. The United States is the world's largest producer of broad silk and the wearing apparel industries are the principal consumers; production, therefore, is estimated to be very large, although statistics are not available.
----------	393,793	----------	------	31.4	
----------	261,553	----------	------	43.9	
----------	374,836	----------	------	55.7	
----------	604,946	----------	------	67.9	
----------	442,526	----------	------	72.1	
----------	179,038	----------	------	16.1	This classification covers a wide variety of articles such as silk counterpanes, novelty handbags, articles for interior decoration, and surgical appliances. The latter are important in imports from Japan. Statistics for domestic production are not available. France was the principal source of imports under this classification in 1934, as well as in previous years.
----------	85,284	----------	------	23.2	
----------	45,558	----------	------	27.4	
----------	59,198	----------	------	35.3	
----------	78,110	----------	------	38.8	
----------	51,362	----------	------	40.5	
363,071	63,198	.174	9.3	8.0	Rayon waste includes (1) open waste and (2) thread waste, both discarded in the manufacture of rayon yarns, and (3) converters' mill waste occurring in textile operations such as throwing, knitting, weaving, and braiding. The first type is used as the raw material for the manufacture of "tops" by processes similar to those employed in the production of wool tops for worsted yarn spinning. The second and third types, because of their hard condition, are garnetted and spun into yarn by the woolen system of spinning. Domestic production of types (1) and (2) was estimated to be about 6,310,000 pounds in 1934, or 3 percent of the total output of rayon yarn. Less than half of this consisted of type (1). No information is available as to the domestic production of converters' mill waste. Imports consist chiefly of type (1), open waste obtained from bright yarns, averaging around 6 or 7 deniers per filament. Open waste of this description is the most desirable type for top manufacture. The domestic supply of open waste suitable for top manufacture has been declining in recent years since the introduction of semi-dull and extra dull luster pigmented yarns with multi-filament structure averaging around 2½ to 3¾ deniers per filament. Imports supply a considerable proportion of domestic consumption of open waste suitable for top manufacture. In 1934, the Netherlands and Italy were the second and third most important sources of imports, Japan being first.
131,726	10,586	.080	9.3	7.7	
40,500	3,048	.075	15.2	8.7	
337,138	38,736	.115	13.3	9.1	
405,951	55,186	.136	31.7	30.8	
483,627	61,297	.127	64.4	62.3	
----------	----------	----------	------	------	Imports from Japan consist chiefly of inexpensive beach pajamas, coolie coats, and negligees of a quality below that of both domestic production and imports from other countries. Imports from France and Austria, the other leading sources of imports, are largely men's neckties and lounging robes. Although statistics are not available, domestic production of rayon wearing apparel, particularly women's dresses, slips, etc., is known to be large and imports small in comparison.
48,967	82,269	1.69	82.3	53.7	
29,629	24,263	.819	65.1	23.7	
16,612	16,063	.967	48.2	15.1	
19,236	21,258	1.11	61.2	22.9	
13,418	13,666	1.02	61.7	25.1	

[a] Not including silk mixed with other fibers.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1403	Manufactures of papier mâché, n.s.p.f.[3]	25 percent	25.0	25.0	1929			$582,491	
		do	25.0	25.0	1931			295,982	
		do	25.0	25.0	1932			205,645	
		do	25.0	25.0	1933			326,125	
		do	25.0	25.0	1934			312,451	
		do	25.0	25.0	1935[1]			177,070	
1404	Copying paper, weighing not over 6 pounds to the ream.	6 cents per pound and 15 percent.			1929[4]				
		6 cents per pound and 20 percent.	26.3	26.2	1931	Pound	422,950	402,477	$0.952
		do	31.0	30.9	1932	do	353,959	193,901	.548
		do	35.0	35.0	1933	do	352,653	140,924	.400
		do	31.9	31.9	1934	do	305,750	153,748	.503
		do	32.8	32.8	1935[1]	do	165,987	77,626	.468
1404	Bibulous paper, weighing not over 6 pounds to the ream.	6 cents per pound and 15 percent.			1929[4]				
		6 cents per pound and 20 percent.	28.8	28.8	1931	Pound	36,313	24,792	.683
		do	30.2	30.2	1932	do	15,177	8,964	.591
		do	36.5	36.5	1933	do	22,364	8,133	.364
		do	35.4	35.4	1934	do	31,231	12,185	.390
		do	33.9	33.9	1935[1]	do	40,275	17,395	.432
1404	Tissue and similar paper, weighing not over 6 pounds to the ream, other than stereotype, copying, condenser, carbon coated or uncoated, bibulous, pottery and waxing papers.	6 cents per pound and 15 percent.			1929[4]				
		6 cents per pound and 20 percent.	31.4	26.3	1931	Pound	170,953	89,711	.525
		do	35.5	41.8	1932	do	48,547	18,777	.387
		do	37.7	42.0	1933	do	132,363	44,818	.339
		do	35.6	40.5	1934	do	171,715	66,048	.385
		do	35.3	40.6	1935[1]	do	103,541	40,668	.393
1405	Boxes of paper, papier mâché, or wood, covered with surface-coated, parchment, lithographed, or similar papers, or covered or lined with cotton or other vegetable fiber.	5 cents per pound and 20 percent.	26.9	38.0	1929	do	2,089,971	1,511,263	.723
		do	27.6	39.8	1931	do	1,489,187	977,607	.656
		do	28.5	65.8	1932	do	1,125,804	662,216	.588
		do	27.7	48.0	1933	do	893,450	582,370	.652
		do	27.3	38.2	1934	do	873,699	597,522	.684
		do	27.6	28.0	1935[1]	do	269,250	177,957	.661
1405	Bags, and articles of surface-coated, parchment, or similar papers.	5 cents per pound and 20 percent.	30.2	37.4	1929	do	827,353	406,186	.491
		do	30.3	33.3	1931	do	509,659	248,469	.488
		do	33.2	58.5	1932	do	279,359	111,119	.398
		do	33.2	40.4	1933	do	325,164	122,725	.377
		do	31.6	40.3	1934	do	248,831	107,321	.431
		do	32.8	42.0	1935[1]	do	218,769	85,664	.392
1409	Papers, n.s.p.f.	30 percent	30.0	30.0	1929			176,597	
		do	30.0	30.0	1931			227,256	
		do	30.0	30.0	1932			200,077	
		do	30.0	30.0	1933			261,418	
		do	30.0	30.0	1934			81,516	
		do	30.0	30.0	1935[1]			61,265	

[1] 8 months
[4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
----------	$15,647	----------	------	2.7	Imports from Japan consist of a variety of novelty items such as trays, toys, coasters, cocktail sets, figures of animals, buildings, etc., made of papier mâché, and finished with paint, lacquer, or designs. Items popular in consumption change rapidly as new ideas are developed; trays appeared to predominate in imports from Japan in 1934. No data regarding domestic production is available. Germany and France are important sources of imports of manufactures of papier mâché, n. s. p. f.
----------	22,053	----------	------	7.5	
----------	65,035	----------	------	31.6	
----------	178,803	----------	------	54.8	
----------	207,557	----------	------	66.4	
----------	73,711	----------	------	41.6	
----------	----------	----------	------	------	Copying tissue is a strong, soft-textured, thin paper used principally for manifolding and letterpress work. For these types of work, qualities of toughness and extreme thinness of paper must be combined. No statistics are available regarding domestic production of copying paper weighing not over 6 pounds to the ream, but imports are known to constitute a very large proportion of domestic consumption. The imported paper is higher in price and probably better in quality than domestic copying tissue used for similar purposes.
415,443	399,361	$0.961	98.2	99.2	
352,310	193,275	.549	99.5	99.7	
351,463	140,499	.400	99.2	99.7	
305,750	153,748	.503	100.0	100.0	
165,957	77,622	.468	99.98	99.99	
----------	----------	----------	------	------	Imports, which come exclusively from Japan, consist chiefly of Yoshino paper, an extremely fine and light-weight paper made from mulberry-bast fiber, used almost entirely in the manufacture of stencils. Domestic production of fine and light-weight paper for the manufacture of stencils is very large, but statistics are not available.
36,313	24,792	.683	100.0	100.0	
15,155	8,946	.590	99.9	99.8	
22,364	8,133	.364	100.0	100.0	
31,231	12,185	.390	100.0	100.0	
40,275	17,395	.432	100.0	100.0	
----------	----------	----------	------	------	Imports from Japan are largely filtering-paper circles, thin filter paper, and Japanese-type tissue papers. The Japanese paper utilized for filtering paper is competitive with various grades produced in the United States, though data on domestic production are not available. The Japanese-type tissue papers are used chiefly for art decorative purposes and have no counterpart in this country.
48,525	46,058	[84].949	28.4	51.3	
17,219	4,733	.275	35.5	25.2	
27,397	7,484	.273	20.7	16.7	
56,287	16,485	.293	32.8	25.0	
58,363	16,997	.291	56.4	41.8	
31,453	8,730	.278	1.5	.6	Japan is a relatively small supplier of paper and wood boxes covered with paper, ranking after France, Germany, and the United Kingdom. Imports from Japan are chiefly boxes manufactured from surface-coated paper and used by pharmacies as containers for pills, capsules, and medicinal powders. Similar boxes are imported to some extent from Germany. Imports from France are fancy boxes used as containers for toilet preparations. There is a substantial domestic production of boxes similar to the Japanese product.
41,213	10,431	.253	2.8	1.1	
46,001	5,024	.109	4.1	.8	
16,032	2,865	.179	1.8	.5	
58,806	16,129	.274	6.7	2.7	
33,376	20,957	.628	12.4	11.8	
9,971	2,858	.287	1.2	.7	Germany, Japan, France, the United Kingdom, and the Netherlands were all important sources of imports under this classification in 1934. Imports from Japan consist principally of bags made from greaseproof and imitation-parchment paper, and used as containers. Trade in containers of this type is usually on order, dimensions and quality being specified. Domestic production of such containers is known to be large but statistics are not available.
13,057	4,918	.377	2.6	2.0	
9,983	1,295	.130	3.6	1.2	
11,127	2,721	.245	3.4	2.2	
50,365	12,429	.247	20.2	11.6	
67,173	15,249	.227	30.7	17.8	
----------	9,764	----------	------	5.5	The United Kingdom and Germany are important sources of imports under this miscellaneous classification. Imports from Japan are mainly high-grade papers, distinctive as to material, finish, and color. One of the principal types imported is the so-called rice paper. Japanese paper is used for announcements, placards, and for other purposes, especially where the preference is for lettering or decorating by means of the artists' brush. There is no domestic production of paper comparable with the product imported from Japan.
----------	15,641	----------	------	6.9	
----------	5,747	----------	------	2.9	
----------	6,267	----------	------	2.4	
----------	14,492	----------	------	17.8	
----------	21,712	----------	------	35.4	

[84] In 1920 classified as "Pulp or papier mâché, and manufactures, n. s. p. f."
[85] The high unit value is explained by a single shipment of high-priced paper.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1410	Maps, charts, blank and slate books, engravings, etchings, photographs, and drawings, except work of art.	25 percent	25.0	25.0	1929			$608,440	
		do	25.0	25.0	1931			276,185	
		do	25.0	25.0	1932			183,680	
		do	25.0	25.0	1933			118,107	
		do	25.0	25.0	1934			166,843	
		do	25.0	25.0	1935[1]			128,656	
1410	"Other" books, etc., n. s. p. f. (Not of foreign authorship.)	25 percent	25.0	25.0	1929			1,440,375	
		do	25.0	25.0	1931			621,806	
		do	25.0	25.0	1932			346,563	
		do	25.0	25.0	1933			286,786	
		do	25.0	25.0	1934			242,649	
		Various [37]	24.7	25.0	1935[1]			192,988	
1413	Boxes of paper, papier-mâché, or paper board, n. s. p. f.	35 percent	35.0	35.0	1929			219,956	
		do	35.0	35.0	1931			64,905	
		do	35.0	35.0	1932			38,249	
		do	35.0	35.0	1933			29,048	
		do	35.0	35.0	1934			36,144	
		do	35.0	35.0	1935[1]			18,749	
1413	Manufactures of paper, n. s. p. f.	do	35.0	35.0	1929 [38]			1,815,820	
		do	35.0	35.0	1931			766,120	
		do	35.0	35.0	1932			509,824	
		do	35.0	35.0	1933			441,881	
		do	35.0	35.0	1934			550,175	
		do	35.0	35.0	1935[1]			386,860	
1502	Rubber balls, other than golf and tennis balls.	30 percent			1929[4]				
		do			1931[4]				
		do			1932[4]				
		do	30.0	30.0	1933	Number	1,063,662	$33,495	$0.031
		do	30.0	30.0	1934	do	1,541,211	57,880	.038
		do	30.0	30.0	1935[1]	do	2,338,592	68,819	.029
1502	Base, foot, and other balls not of rubber, for use in physical exercise or sports.	30 or 60 percent			1929[4]				
		30 percent			1931[4]				
		do			1932[4]				
		do	30.0	30.0	1933	Number	4,916,654	70,130	.014
		do	30.0	30.0	1934	do	3,616,958	76,970	.021
		do	30.0	30.0	1935[1]	do	1,857,456	51,411	.028
1502	Tennis rackets	do	30.0	30.0	1929	do	933,177	123,193	.132
		do	30.0	30.0	1931	do	669,952	74,580	.111
		do	30.0	30.0	1932	do	612,404	55,515	.091
		do	30.0	30.0	1933	do	1,001,510	89,100	.089
		do	30.0	30.0	1934	do	977,733	84,128	.086
		do	30.0	30.0	1935[1]	do	532,497	37,384	.070

[1] 8 months.
[4] Not separately classified.
[37] New classes were set up under the trade agreement between the United States and Belgium, effective May 1, 1935.
[38] Classification in 1929 not comparable with classification under Tariff Act of 1930.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
----------	$7,655	----------	------	1.3	The United Kingdom and Germany are important sources of imports under this classification. The principal imports from Japan are etchings and drawings. Because of the distinctive nature of Japanese art, such works are considerably in demand in the United States. There is virtually no domestic production of etchings and drawings similar to the Japanese products.
----------	6,744	----------	------	2.4	
----------	5,014	----------	------	2.7	
----------	9,852	----------	------	8.3	
----------	44,895	----------	------	26.9	
----------	37,833	----------	------	29.4	
----------	27,711	----------	------	1.9	Imports from Japan are principally bound books, printed in English. Many are works of typographical art illustrated in half-tone or lithographically; some are English translations of Japanese books. There is practically no importation of books written by American authors but printed abroad. Total imports of books printed in English are small relative to domestic production and exports. The total domestic production of books and pamphlets was valued at $95,312,000 in 1933. Other important sources in 1934 were the United Kingdom, Germany, Canada, and France.
----------	18,652	----------	------	3.0	
----------	14,247	----------	------	4.1	
----------	38,549	----------	------	13.4	
----------	51,977	----------	------	21.4	
----------	48,004	----------	------	24.9	
----------	40,438	----------	------	18.5	Imports consist largely of small square, rectangular or round boxes of the type used by druggists for packaging prescription powders or pills. They are made of paperboard or paper, either plain, glazed, or coated. Relatively few are made of papier-maché. They come in a variety of sizes and dimensions; some with covers and others with hinged tops. Similar boxes are produced domestically but no information is available as to the quantity. Germany and France, as well as Japan, are leading sources of imports of boxes under this classification.
----------	16,750	----------	------	25.8	
----------	10,900	----------	------	28.5	
----------	12,918	----------	------	44.5	
----------	21,184	----------	------	58.6	
----------	8,588	----------	------	45.8	
----------	288,276	----------	------	15.9	This classification includes a wide variety of miscellaneous paper products, including carnival and party novelties, advertising media, articles for household and office use, etc. Prior to 1934 Germany was the principal source of imports but in 1934 and 1935 (8 months), imports from Germany declined and Japan has taken first rank. Imports from Japan are of a miscellaneous character and include advertising novelties, note books, carnival novelties, decorative articles, napkins, shades, and parasols. These articles compete in varying degrees with domestic products; the most competitive are probably carnival hats.
----------	147,305	----------	------	19.2	
----------	78,982	----------	------	15.5	
----------	101,775	----------	------	23.0	
----------	274,709	----------	------	49.9	
----------	187,592	----------	------	48.5	
----------	----------	----------	------	------	This classification includes rubber balls used in physical exercise, except golf and tennis balls; it does not include rubber balls used chiefly for the amusement of children, the latter being classified as toys. Imports, largely beach and sponge rubber balls, come almost exclusively from Japan. Imports from Japan retail in the United States at lower prices than the bulk of domestic balls. Imports from that country, which have increased during the last 2 years, are large relative to domestic production of comparable grades but small relative to total domestic production of all grades.
----------	----------	----------	------	------	
----------	----------	----------	------	------	
981,607	29,891	$0.030	92.3	89.2	
1,497,866	54,488	.036	97.2	94.1	
2,332,245	68,151	.029	99.7	99.0	
----------	----------	----------	------	------	Imports consist chiefly of celluloid table tennis balls. Under the act of 1922 such balls were dutiable at 60 percent ad valorem. Imports of such balls from the United Kingdom, the principal source of supply, are higher priced than those from Japan. The domestic production of table tennis balls is small and consists mainly of grades similar to the Japanese articles. Imports under this classification, of balls other than table tennis balls, are negligible when compared with domestic production
----------	----------	----------	------	------	
----------	----------	----------	------	------	
752,711	5,357	.007	15.3	7.6	
971,095	13,215	.014	26.8	17.2	
837,258	17,332	.021	45.1	33.7	
677,258	100,724	.149	72.6	81.8	Imported Japanese rackets are used almost exclusively by children and beginners. They sell at retail for $1 or less each, the bulk around 25 to 35 cents. Lowest priced domestic rackets sell for approximately $1, the great bulk around $3.50 and some as high as $15.
452,250	61,337	.136	67.5	82.2	
466,320	42,072	.090	76.1	75.8	
988,749	82,573	.084	98.7	92.7	
971,977	81,225	.084	99.4	96.5	
517,423	33,599	.065	97.2	89.9	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1503	Imitation pearl beads, hollow or filled.	60 percent			1929 [4]				
		do	60.0	60.0	1931			$79,794	
		do	60.0	60.0	1932			31,710	
		do	60.0	60.0	1933			30,178	
		do	60.0	60.0	1934			30,139	
		do	60.0	60.0	1935 [1]			10,585	
1503	Imitation pearl beads, solid, other than iridescent, valued not more than ¼ cent per inch.	do			1929 [4]				
		do	60.0	60.0	1931	Inch	420,847,851	440,428	$0.0010
		do	60.0	60.0	1932	do	204,076,486	170,180	.0008
		do	60.0	60.0	1933	do	144,308,052	103,950	.0007
		do	60.0	60.0	1934	do	82,553,375	59,485	.0007
		do	60.0	60.0	1935 [1]	do	47,524,553	27,511	.0006
1503	Beads, spangles, and bugles, n. s. p. f.	35 percent	35.0	35.0	1929			2,718,283	
		do	35.0	35.0	1931			2,672,330	
		do	35.0	35.0	1932			1,001,208	
		do	35.0	35.0	1933			486,895	
		do	35.0	35.0	1934			465,307	
		do	35.0	35.0	1935 [1]			238,864	
1503	Fabrics and articles of beads, spangles, or bugles, not elsewhere specified, except imitation pearl, imitation precious or semi-precious stones, and synthetic resin beads, not ornamented with beads, spangles, or bugles, not embroidered, tamboured, appliqued, or scalloped.	60 percent	60.0	60.0	1929			384,435	
		do	60.0	60.0	1931			383,991	
		do	60.0	60.0	1932			456,119	
		do	60.0	60.0	1933			392,679	
		do	60.0	60.0	1934			589,060	
		do	60.0	60.0	1935 [1]			555,410	
1504	Hat braids, plaits, and laces of hemp, containing a substantial part, but not wholly or in chief value, of rayon or other synthetic textile.	15 or 20 percent.			1929 [4]				
		45 percent			1931 [4]				
		do			1932 [4]				
		do	45.0	45.0	1933	Yard	325,721,937	712,240	.0022
		do	45.0	45.0	1934	do	543,912,703	953,225	.0018
		do	45.0	45.0	1935 [1]	do	322,403,774	523,864	.0016
1504	Hat braids, plaits, and laces of straw, not bleached, dyed, colored, or stained.	15 percent	15.0	15.0	1929	do	405,982,176	1,292,554	.0032
		do	15.0	15.0	1931	do	133,403,885	349,098	.0026
		do	15.0	15.0	1932	do	89,269,669	186,090	.0021
		do	15.0	15.0	1933	do	129,075,249	252,513	.0020
		do	15.0	15.0	1934	do	123,570,691	294,230	.0024
		do	15.0	15.0	1935 [1]	do	7,084,147	153,178	.0022
1504	Hat braids, plaits, and laces of manila hemp, not bleached, dyed, colored, or stained.	do	15.0	15.0	1929	do	291,870,859	1,970,041	.0067
		do	15.0	15.0	1931	do	44,811,126	214,211	.0048
		do	15.0	15.0	1932	do	26,167,109	67,512	.0026
		do	15.0	15.0	1933	do	34,051,362	62,567	.0018
		do	15.0	15.0	1934	do	44,180,821	104,457	.0024
		do	15.0	15.0	1935 [1]	do	13,223,195	27,230	.0021

[1] 8 months.
[4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					
Japan			Proportion from Japan		Comments
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
----------	----------	----------	------	------	Imitation pearl beads are imported from Japan either loose, or strung without clasp attached, and are made into necklaces in the United States. There is very little domestic production of low-priced beads comparable to the Japanese article, the bulk of the domestic production consisting of higher-priced beads.
----------	$60,344	----------	------	75.6	
----------	27,204	----------	------	85.8	
----------	25,208	----------	------	83.5	
----------	27,140	----------	------	90.0	
----------	8,648	----------	------	81.7	
390,013,670	409,050	$0.0010	92.7	92.9	Imports from Japan consist of imitation pearl beads (loose, and strung without clasp attached), which are made into necklaces in the United States. Imitation pearl beads comparable to the Japanese beads are not produced domestically to any extent. The great bulk of domestic production consists of high-grade imitation pearl beads which are sold as necklaces at a considerably higher price than the Japanese article.
188,954,370	153,496	.0008	92.6	90.2	
130,520,100	87,184	.0007	90.5	83.9	
78,382,764	54,388	.0007	94.9	91.4	
43,139,527	23,996	.0006	90.8	87.2	
----------	98,226	----------	------	3.6	Imports are chiefly glass beads (loose, or if strung, without clip attached) for necklaces. Czechoslovakia is the principal supplier. The domestic production of similar beads is small.
----------	196,968	----------	------	7.4	
----------	69,397	----------	------	6.9	
----------	48,278	----------	------	9.9	
----------	84,133	----------	------	18.1	
----------	61,756	----------	------	25.9	
----------	60,474	----------	------	15.7	Imports are chiefly beaded bags, and beaded bag plates which are made into beaded bags in the United States. Imports from Japan, relatively small compared with the total, consist of miscellaneous beaded articles of which the most important are glass bead necklaces, valued less than 20 cents per dozen, (if valued more they are dutiable as jewelry). Glass bead necklaces, valued less than 20 cents per dozen, are also imported from Czechoslovakia. The domestic production of comparable necklaces is small.
----------	7,061	----------	------	1.8	
----------	31,934	----------	------	7.0	
----------	29,883	----------	------	7.6	
----------	53,119	----------	------	9.0	
----------	25,187	----------	------	4.5	
----------	----------	----------	------	------	Imports consist entirely of pedaline braid, the strands of which have hemp cores, wrapped spirally with a narrow strip of cellophane. Prior to 1931 when pedaline braids were used only for high priced millinery, imports came almost entirely from Switzerland and these braids were produced in fairly substantial quantities in the United States. Imports from Japan, which began in 1931, have been much lower in price though of comparable quality and have been used exclusively in making low priced millinery. Domestic production ceased after 1932 and imports from Switzerland declined to negligible quantities. The present large demand for pedaline braid for use in making low-priced millinery is dependent upon a supply of these braids at low prices.
----------	----------	----------	------	------	
194,209,112	301,032	.0016	59.6	42.3	
505,239,806	833,308	.0016	92.9	87.4	
303,604,162	446,242	.0015	94.2	85.2	
111,341,183	468,714	.0042	27.4	36.3	Imports are straw braids, chiefly of the sennet type, used in the United States in making men's and women's (chiefly men's) summer hats. There is no domestic production of such braids. The imported unbleached braids are bleached or colored in the United States, machine sewed into hat bodies and finally made into finished hats.
74,079,493	188,758	.0025	55.5	54.1	
50,771,489	95,333	.0019	56.9	51.2	
91,447,284	181,265	.0020	70.8	71.8	
87,077,704	212,165	.0024	70.5	72.1	
50,692,388	98,682	.0019	71.3	64.4	
124,083,076	346,625	.0028	42.5	17.6	Imports, the bulk of which are from Japan, consist of Manila hemp braids which are not bleached, dyed, or colored. There is no production in the United States of these braids. The domestic millinery industry bleaches and colors the imported braids and sews them into hat bodies after which they are made into finished women's hats.
40,615,677	175,037	.0043	90.6	81.7	
19,882,800	43,514	.0022	76.0	64.5	
26,653,825	40,153	.0015	78.3	64.2	
38,271,336	93,858	.0024	86.6	89.8	
12,832,843	26,320	.0021	97.0	96.6	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1504	Hat braids, plaits, and laces of straw, bleached, dyed, colored, or stained.	20 percent	20.0	20.0	1929	do	37,209,888	$321,710	$0.0086
		25 percent	25.0	25.0	1931	do	24,693,838	102,439	.0041
		do	25.0	25.0	1932	do	25,401,413	76,162	.0030
		do	25.0	25.0	1933	do	55,178,913	138,295	.0025
		do	25.0	25.0	1934	do	18,090,923	53,381	.0030
		do	25.0	25.0	1935[1]	do	7,863,807	19,532	.0025
1504	Hats, bonnets, and hoods of paper imitation Panama, not blocked or trimmed; not bleached, dyed, or colored.	35 percent			1929[4]				
		25 percent			1931[4]				
		do			1932[4]				
		do	25.0	25.0	1933	Number	786,909	61,823	.079
		do	25.0	25.0	1934	do	1,332,871	134,467	.101
		do	25.0	25.0	1935[1]	do	411,315	46,268	.112
1504	Hats, bonnets, and hoods of straw, not blocked or trimmed; not bleached, dyed, or colored.	35 percent			1929[4]				
		25 percent	25.0	25.0	1931	Number	7,245,396	2,719,602	.375
		do	25.0	25.0	1932	do	2,208,476	712,778	.323
		do	25.0	25.0	1933	do	2,223,537	658,534	.296
		do	25.0	25.0	1934	do	3,803,743	1,286,548	.338
		do	25.0	25.0	1935[1]	do	1,174,798	451,818	.385
1504	Hats, bonnets, and hoods, other than of straw, paper or palm leaf, not blocked or trimmed; not bleached, dyed or colored.	35 percent			1929[4]				
		25 percent			1931[4]				
		do			1932[4]				
		do	25.0	25.0	1933	Number	2,667,396	632,894	.237
		do	25.0	25.0	1934	do	4,452,978	1,216,041	.273
		do	25.0	25.0	1935[1]	do	1,864,649	522,336	.280
1504	Hats, bonnets, and hoods of paper imitation Panama, not blocked or trimmed; bleached, dyed, or colored.	35 percent			1929[4]				
		2½12 cents each and 25 percent.			1931[4]				
		do			1932[4]				
		do	46.9	47.1	1933	Number	7,133,030	678,158	.095
		do	39.8	39.9	1934	do	5,782,984	814,954	.141
		do	37.5	37.5	1935[1]	do	2,800,494	468,049	.167
1504	Hats, bonnets, and hoods of straw, not blocked or trimmed; bleached, dyed, or colored.	35 percent			1929[4]				
		2½12 cents each and 25 percent.	30.9	34.3	1931	Number	1,060,068	371,250	.350
		do	43.1	47.1	1932	do	594,642	93,064	.157
		do	40.1	45.4	1933	do	534,931	74,015	.138
		do	30.9	33.8	1934	do	944,182	333,580	.353
		do	31.2	34.8	1935[1]	do	752,157	252,472	.336
1504	Hats, bonnets, and hoods, other than of straw, paper, or palm leaf, not blocked or trimmed; bleached, dyed, or colored.	35 percent			1929[4]				
		2½12 cents each and 25 percent.			1931[4]	Number			
		do			1932[4]	do			
		do	31.6	37.7	1933	do	136,267	42,763	.314
		do	30.3	36.1	1934	do	1,071,331	425,000	.397
		do	32.7	40.8	1935[1]	do	916,589	249,377	.272
1506	Tooth brushes having handles of cellulose compounds (celluloid, etc.).	45 or 60 percent.	45.0 or 60.0	45.0 or 60.0	1929[59]	do	26,439,552	870,488	.033
		2 cents each and 50 percent.	118.3	121.2	1931	do	8,958,496	262,234	.029
		do	164.1	168.3	1932	do	10,599,495	185,716	.018
		do	172.0	177.8	1933	do	11,715,836	192,007	.016
		do	131.1	132.3	1934	do	10,485,820	258,666	.025
		do	138.2	139.3	1935[1]	do	6,258,885	141,944	.023

[1] 8 months.
[4] Not separately classified.
[59] In 1929 this classification did not include tooth brushes having handles or backs of cellulose but in chief value of bristles. Large quantities of such brushes were imported that year. (See "Tooth brushes having handles or backs of materials other than of cellulose compounds" p. 162)

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					
Japan			Proportion from Japan		Comments
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
595,200	$990	$0.0017	1.6	0.3	Imports are comprised of bleached, dyed, or colored straw braids, used in making summer hats, chiefly for men. There is no production in the United States of unbleached straw braids. Imported braids are sewn by machine into hat bodies which are subsequently made into finished hats. In years prior to 1933, imports of braids of this type came principally from the United Kingdom and Italy.
226,304	563	.0025	.9	.5	
2,359,204	4,960	.0021	9.3	6.5	
47,221,917	108,775	.0023	85.6	78.6	
14,443,487	43,206	.0030	79.8	80.9	
5,796,926	14,485	.0025	73.7	74.1	
					Imports are rough, unblocked, unbleached, or uncolored paper hat bodies, supplied almost wholly by Japan. There is no domestic production of this kind of hat body. There is a substantial domestic industry engaged in bleaching, dyeing, and blocking these bodies, making therefrom low-priced summer hats.
767,745	57,851	.075	97.6	93.6	
1,331,645	133,840	.100	99.9	99.5	
411,315	46,268	.112	100.0	100.0	
690,174	124,785	.181	9.5	4.6	Imports consist of rough, unblocked, unbleached, and uncolored straw hat bodies which are made into finished summer hats in the United States. Japan is a relatively small factor in total imports. No straw hat bodies of this kind are produced domestically. Italy and China are the principal sources of imports.
176,300	24,852	.141	8.0	3.5	
100,882	19,022	.189	4.5	2.9	
343,581	67,488	.196	9.0	5.2	
153,347	27,870	.182	13.1	6.2	
					Imports consist of a wide variety of unbleached and undyed hat bodies, chiefly for women's summer hats, made of materials other than straw or palm leaf. The bulk of imports from Italy and Switzerland, the principal suppliers, consists of neora ramaille bodies (ramie fibers laminated with cellophane). Imports from Japan consist of many different kinds. There is no domestic production of hat bodies of these types. The domestic millinery industry converts these rough hat bodies into finished hats. Styles of summer hats change rapidly and the nature of imports in this group varies widely from year to year.
316,106	42,652	.135	11.8	6.7	
790,339	139,868	.177	17.7	11.5	
549,623	82,100	.149	29.5	15.7	
					Imports, almost exclusively from Japan, are rough, unblocked paper hat bodies which have been bleached, dyed, or colored. This type of hat body is not produced in the United States. Imported hat bodies are made into inexpensive summer hats by the domestic millinery industry.
7,067,934	667,088	.094	99.1	98.4	
5,745,580	802,250	.140	99.4	98.4	
2,796,066	466,247	.167	99.8	99.6	
472,877	106,366	.225	44.6	28.6	Imports consist of rough, unblocked straw hat bodies which have been bleached, dyed, or colored, and come principally from Italy and the United Kingdom. There is no production of straw hat bodies of this type in the United States, although a substantial domestic industry makes finished hats from the imported, rough bodies.
521,173	66,949	.128	87.6	71.9	
459,377	46,994	.102	85.9	63.5	
162,952	38,675	.237	17.3	11.6	
94,528	20,078	.212	12.6	8.0	
					Imports are made up of a wide variety of bleached or dyed hat bodies, chiefly for women's summer hats, made of materials other than straw or palm leaf. Most of the imports from Italy, the outstanding source, and some of those from Japan, consist of Neora ramaille bodies (ramie fibers laminated with cellophane). Hat bodies of these types are not produced domestically.
38,778	6,385	.165	28.5	14.9	
104,286	19,591	.188	9.7	4.6	
169,518	22,390	.132	18.5	9.0	
25,663,980	835,039	.033	97.1	95.9	Imports of cellulose handle tooth brushes, principally from Japan, constitute roughly one-fifth of the domestic consumption of that type. Imports have increased in quantity since 1931. The equivalent ad valorem of the existing duty amounted to approximately 140 percent in the first 8 months of 1935.
8,785,205	246,600	.028	98.1	94.0	
10,451,669	176,724	.017	98.6	95.2	
11,610,007	181,684	.016	99.1	94.6	
10,448,642	253,904	.024	99.6	98.2	
6,233,739	139,560	.022	99.6	98.3	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1506	Toilet brushes other than tooth and hair brushes, having handles or backs of cellulose compounds (celluloid, etc.).	45 or 60 per cent.	------	------	1929[4]	----------	----------	----------	------
		2 cents each and 50 percent.	90.5	101.2	1931	Number	1,010,164	$49,833	$0.049
		------do------	120.6	134.6	1932	---do----	855,385	24,242	.0283
		------do------	124.0	127.4	1933	---do----	638,498	17,253	.027
		------do------	105.4	106.1	1934	---do----	1,155,741	41,721	.036
		------do------	104.9	105.7	1935[1]	---do----	668,798	24,371	.036
1506	Tooth brushes having handles of material other than of cellulose compounds (celluloid, etc.).	45 percent----	45.0	45.0	1929[60]	---do----	16,864,068	779,244	.046
		1 cent each and 50 percent.	78.4	85.0	1931	---do----	4,315,581	151,936	.035
		------do------	96.1	104.6	1932	---do----	4,361,124	94,578	.022
		------do------	113.8	125.1	1933	---do----	4,594,040	71,996	.016
		------do------	92.8	101.3	1934	---do----	4,923,854	115,132	.023
		------do------	96.0	104.9	1935[1]	---do----	3,159,728	68,705	.022
1506	Hair brushes having handles or backs of material other than of cellulose compounds (celluloid, etc.).	45 percent----	------	------	1929[4]	----------	----------	----------	------
		1 cent each and 50 percent.	53.8	54.6	1931	Number	503,679	133,147	.264
		------do------	57.9	60.5	1932	---do----	634,916	80,814	.127
		------do------	61.2	64.0	1933	---do----	655,616	58,417	.089
		------do------	61.9	65.1	1934	---do----	685,773	57,762	.084
		------do------	65.5	69.1	1935[1]	---do----	653,859	42,216	.065
1506	Toilet brushes, other than tooth brushes and hair brushes, having handles or backs of material other than of cellulose compounds (celluloid, etc.).	45 percent----	------	------	1929[4]	----------	----------	----------	------
		1 cent each and 50 percent.	62.4	67.8	1931	Number	1,358,967	109,434	.081
		------do------	67.8	77.9	1932	---do----	1,350,390	75,676	.056
		------do------	73.5	84.2	1933	---do----	1,671,509	71,105	.043
		------do------	69.9	79.0	1934	---do----	2,029,648	101,742	.050
		------do------	73.8	82.8	1935[1]	---do----	1,604,097	67,537	.042
1506	Handles and backs of cellulose compounds (celluloid, etc.) for tooth brushes.	60 percent----	60.0	60.0	1929[61]	---do----	4,556,592	60,156	.013
		1 cent each and 50 percent.	112.2	112.3	1931	---do----	3,362,624	54,065	.016
		------do------	144.1	143.6	1932	---do----	5,971,536	63,486	.011
		------do------	166.2	166.2	1933	---do----	4,957,240	42,648	.009
		------do------	146.1	146.1	1934	---do----	3,534,041	36,767	.010
		------do------	146.8	146.8	1935[1]	---do----	3,926,792	40,559	.010
1506	Hair pencils in quills or otherwise, including artists' brushes.	45 percent----	45.0	45.0	1929[62]	---do-----	46,023,936	354,792	.008
		40 percent----	40.0	40.0	1931	---do-----	34,542,022	216,981	.006
		------do------	40.0	40.0	1932	---do-----	35,039,323	144,693	.004
		------do------	40.0	40.0	1933	---do-----	43,326,871	169,251	.004
		------do------	40.0	40.0	1934	---do-----	66,675,790	276,910	.004
		------do------	40.0	40.0	1935[1]	---do-----	54,803,514	164,585	.003
1506	Brushes, n. s. p. f------	45 percent----	45.0	45.0	1929	---do-----	6,578,136	145,430	.022
		50 percent----	50.0	50.0	1931	---do-----	3,667,533	61,431	.017
		------do------	50.0	50.0	1932	---do-----	4,696,945	45,034	.0096
		------do------	50.0	50.0	1933	---do-----	4,466,235	44,579	.010
		------do------	50.0	50.0	1934	---do-----	2,986,282	44,756	.015
		------do------	50.0	50.0	1935[1]	---do-----	1,563,761	25,372	.016
1507	Bristles, sorted, bunched, or prepared.	7 cents pound	5.3	3.5	1929	Pound---	5,004,192	6,662,462	1.33
		3 cents pound	3.3	1.9	1931	---do-----	4,176,665	3,756,463	.899
		------do------	4.2	2.3	1932	---do-----	3,240,975	2,295,532	.708
		------do------	3.8	1.3	1933	---do-----	4,945,406	3,941,265	.797
		------do------	2.6	.9	1934	---do-----	4,143,049	4,745,059	1.15
		------do------	2.3	.9	1935[1]	---do-----	2,978,461	3,866,827	1.30

[1] 8 months.
[4] Not separately classified.
[60] In 1929 brushes having handles or backs of cellulose but in chief value of bristles were included in this classification. Such brushes represented in that year about 75 percent of total imports and of imports from Japan. (See "Tooth brushes having handles or backs of cellulose compounds" above.)

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					
Japan			Proportion from Japan		Comments
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
941,396	$36,752	$0.039	93.2	73.8	Japanese toilet brushes retail in the United States usually at 10 to 25 cents each. Some domestic brushes retail at similar prices but the larger proportion of the domestic production consists of higher priced brushes. Imports are small relative to domestic production. Existing duties on these articles are equivalent to more than 100 percent ad valorem.
836,277	19,773	.0236	97.8	81.6	
632,935	16,355	.026	99.1	94.8	
1,152,107	41,084	.036	99.7	98.5	
663,636	23,813	.036	99.2	97.7	
15,708,396	663,589	.042	93.1	85.2	Imports are chiefly low priced tooth brushes, having bamboo handles, a type not produced in the United States since 1934. Some bamboo-handle tooth brushes are sold chiefly to prisons, asylums, and other public or charitable institutions; others are marketed in regular trade channels. Bone-handle tooth brushes, the next most important type imported (imports of which have increased recently), are produced in small quantities in the United States.
3,974,247	113,660	.029	92.1	74.8	
4,189,252	76,732	.018	96.1	81.1	
4,497,364	59,870	.013	97.9	83.2	
4,733,150	92,233	.019	96.1	80.1	
3,063,426	55,768	.018	97.0	81.2	
465,741	94,823	.204	92.3	71.2	Imports from Japan are chiefly hardwood brushes (ebony, mahogany, satinwood, etc.). Imports are fairly large relative to domestic production of hardwood brushes. Most domestic producers of these brushes import the handles and backs; the other producers cut handles and backs from imported hardwood logs. There is considerable competition between these 2 groups of domestic producers.
603,804	57,543	.095	95.1	71.2	
627,429	44,845	.071	95.7	76.8	
668,752	44,401	.066	97.5	76.9	
642,085	33,610	.052	98.2	79.6	
1,198,450	67,342	.056	88.2	61.6	A considerable part of the imports from Japan consists of hand, complexion, hat and cloth brushes, containing bristles or vegetable fibers and having wooden handles or backs. Imports are fairly large relative to domestic production. The present compound duty is equivalent to about 80 percent ad valorem on imports from Japan which is somewhat higher than the ad valorem equivalent on combined imports from all countries.
1,021,975	36,694	.036	75.7	48.5	
1,420,576	41,580	.029	85.0	58.5	
1,932,028	66,576	.034	95.2	65.4	
1,554,277	47,454	.031	96.9	70.3	
4,369,536	54,327	.012	95.9	90.3	Imports are wholly from Japan. About 10 percent of the celluloid tooth brushes made in the United States are fitted with imported celluloid handles.
3,356,240	53,903	.016	99.8	99.7	
5,906,304	63,133	.011	98.9	99.4	
4,957,240	42,648	.009	100.0	100.0	
3,534,041	36,767	.010	100.0	100.0	
3,926,792	40,559	.010	100.0	100.0	
26,129,136	48,208	.002	56.8	13.6	The bulk of imports consists of low-priced hair pencils from Japan which are used largely in children's school sets. Small quantities of medium- and high-grade pencils (types used by artists) are imported respectively from Germany and the United Kingdom. Machine methods are not adaptable to the production of these articles. There is virtually no domestic production of low- and high-grade pencils and only a small domestic production of medium grade.
22,563,098	23,906	.001	65.3	11.0	
24,979,429	18,643	.0007	71.3	12.9	
34,070,108	29,958	.0009	78.6	17.7	
56,617,279	71,819	.001	84.9	25.9	
49,530,271	61,423	.001	90.4	37.3	
3,546,888	47,040	.014	53.9	33.0	Imports consist of miscellaneous brushes, a few types of which are similar to domestic brushes, but most imported types are not produced domestically. The bulk of domestic production consists of industrial and household brushes, imports of which are negligible. Total imports are small relative to exports.
2,785,337	24,083	.009	75.9	39.2	
3,914,500	15,394	.0039	93.3	34.2	
3,609,506	13,537	.004	80.8	30.4	
2,342,746	19,795	.008	78.4	44.2	
1,421,878	13,866	.010	90.9	54.6	
195,670	394,980	2.02	3.9	5.9	Japan is a relatively small supplier of imports, ranking after China and the United Kingdom. Imported bristles are used in the manufacture of brushes. There is practically no domestic production of bristles.
278,197	448,594	1.61	6.7	11.9	
258,263	343,356	1.33	8.0	15.0	
331,393	740,923	2.24	6.7	18.8	
285,417	917,120	3.21	6.9	19.3	
226,726	746,905	3.29	7.6	19.3	

[a] From Apr. 1 to Dec. 31, inclusive.
[e] Includes very small quantities of "artists' brushes" not classified since 1929 as hair pencils.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1509	Buttons of ocean pearl.	1¾ cents line per gross and 25 percent.	103.7	115.7	1929	Gross Gross lines.	133,902 2,378,537	$52,868	$0.395
		----do----	113.9	116.6	1931	Gross Gross lines.	131,543 2,849,123	56,105	.427
		----do----	136.3	138.1	1932	Gross Gross lines.	144,995 3,580,184	56,304	.388
		----do----	161.0	164.2	1933	Gross Gross lines.	236,829 5,173,571	66,566	.281
		----do----	130.7	135.5	1934	Gross Gross lines.	220,378 4,123,354	68,282	.296
		----do----	148.7	151.9	1935[1]	Gross Gross lines.	182,975 3,732,918	52,800	.289
1513	Rubber toys, including toy balloons.	70 percent	70.0	70.0	1929[63]			102,504	
		----do----	70.0	70.0	1931			149,555	
		----do----	70.0	70.0	1932			130,491	
		----do----	70.0	70.0	1933			360,704	
		----do----	70.0	70.0	1934			269,313	
		----do----	70.0	70.0	1935[1]	Pound	891,779	110,725	.124
1513	Dolls of cellulose compounds (celluloid, etc.), having movable parts.	60 percent			1929[4]				
		1 cent each and 60 percent.	108.4	109.5	1931	Number	8,827,494	182,337	.021
		----do----	128.9	130.1	1932	---do----	6,207,143	90,104	.014
		----do----	125.6	126.9	1933	---do----	2,048,764	31,213	.015
		----do----	124.3	124.5	1934	---do----	2,731,909	42,486	.016
		----do----	127.7	128.8	1935[1]	---do----	2,026,157	29,910	.015
1513	Dolls of cellulose compounds (celluloid, etc.), not having movable parts.	60 percent			1929[4]				
		1 cent each and 50 percent.	94.1	97.0	1931	Number	1,888,000	42,832	.023
		----do----	122.9	123.3	1932	---do----	875,659	12,019	.014
		----do----	115.3	116.7	1933	---do----	485,228	7,434	.015
		----do----	100.0	100.6	1934	---do----	671,574	13,432	.020
		----do----	110.5	112.3	1935[1]	---do----	476,225	7,876	.017
1513	Dolls and parts of china, porcelain, parian, bisque, earthen ware, and stoneware.	70 percent			1929[4]				
		----do----	70.0	70.0	1931	Number	13,664,441	275,151	.020
		----do----	70.0	70.0	1932	---do----	17,332,110	194,396	.011
		----do----	70.0	70.0	1933	---do----	14,738,201	186,435	.013
		----do----	70.0	70.0	1934	---do----	16,638,187	204,515	.012
		----do----	70.0	70.0	1935[1]	---do----	10,456,226	108,810	.010
1513	Dolls, doll heads and parts, n. s. p. f. (including clothing, except of lace).	----do----			1929[4]				
		----do----	70.0	70.0	1931			351,594	
		----do----	70.0	70.0	1932			216,945	
		----do----	70.0	70.0	1933			100,443	
		----do----	70.0	70.0	1934			87,907	
		----do----	70.0	70.0	1935[1]			52,288	
1513	Mechanical toys and parts.	----do----	70.0	70.0	1929			325,306	
		----do----	70.0	70.0	1931			208,074	
		----do----	70.0	70.0	1932			163,529	
		----do----	70.0	70.0	1933			85,038	
		----do----	70.0	70.0	1934			90,817	
		----do----	70.0	70.0	1935[1]			118,878	

[1] 8 months.
[4] Not separately classified.
[63] Does not include comparatively small quantities of rubber balls and other articles which in subsequent years were classified as toys.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
{ 108,715 / 1,907,830 }	$36,801	$0.339	81.2	69.6	Imports, almost entirely from Japan, are equivalent to approximately 4 percent of the domestic production of ocean-pearl buttons. About ⅓ of the domestic production of pearl buttons consists of ocean pearl (usually higher in price than the Japanese ocean pearl) and ⅔ of fresh-water pearl (usually lower in price than the Japanese ocean pearl). The Philippine Islands ship from 3 to 5 times as many ocean-pearl buttons to the United States as all other countries combined. The compound duty on imports from Japan was equal, in the first 8 months of 1935, to over 150 percent ad valorem.
{ 125,308 / 2,743,930 }	52,427	.418	95.3	93.4	
{ 142,995 / 3,529,284 }	54,615	.382	98.6	97.0	
{ 227,182 / 5,048,990 }	63,253	.278	95.9	95.0	
{ 207,156 / 3,956,156 }	62,667	.303	89.9	91.8	
{ 176,465 / 3,642,618 }	50,223	.285	96.4	95.1	
----------	70,346	----------	------	68.6	The principal articles of this group are toy animals, fish, balloons, and water pistols. In 1933 imports supplied approximately 6 percent of domestic consumption and since that year have supplied considerably less than 6 percent.
----------	65,053	----------	------	43.5	
----------	82,250	----------	------	63.0	
----------	340,160	----------	------	94.3	
----------	262,692	----------	------	97.5	
877,771	107,304	.122	98.4	96.9	
----------	----------	----------	------	------	
8,727,324	176,379	.020	98.9	96.7	Dolls having movable parts, such as movable heads and limbs, are imported almost exclusively from Japan. Such dolls require more hand labor in their manufacture than dolls not having movable parts. There is only a small domestic production of dolls having movable parts, but dolls not having movable parts are produced in large volume in the United States. The equivalent ad valorem of the present duty was about 124 percent in 1934 and 128 percent in 1935.
6,156,780	87,763	.014	99.2	97.4	
2,042,049	30,525	.015	99.7	97.8	
2,729,031	42,300	.016	99.9	99.6	
2,022,624	20,408	.015	99.8	98.3	
----------	----------	----------	------	------	
1,838,158	39,095	.022	97.4	91.3	Practically all imported dolls not having movable parts are supplied by Japan. Four domestic concerns make most of the celluloid dolls produced in the United States and also supply practically all the celluloid material used by other concerns in the manufacture of these articles. The duty is equivalent to over 100 percent ad valorem.
838,765	11,441	.014	95.8	95.2	
481,238	7,213	.015	99.2	97.6	
669,605	13,237	.020	99.7	98.5	
474,334	7,612	.016	99.6	96.6	
----------	----------	----------	------	------	
11,016,348	148,428	.013	80.6	53.9	Dolls of this class are made in a variety of styles and colors. The majority are composed of bisque and are designed to sell at retail for 10 cents each in the United States. Japan is the outstanding source of imports. Domestic production of these articles, which has never been developed to any considerable extent, is principally by concerns engaged primarily in making other china and earthenware articles.
15,405,005	112,294	.007	88.9	57.8	
12,840,706	104,945	.008	87.1	56.3	
16,090,416	174,357	.011	96.7	85.3	
9,630,768	93,888	.010	92.1	86.3	
----------	----------	----------	------	------	
----------	46,576	----------	------	13.2	Most of the articles in this group are stuffed dolls of textiles or thin leather. Since 1933 imports have been mostly from Japan. In earlier years Germany was the principal source. Most of the imports are not comparable in construction with the domestic product, but are competitive with domestic dolls of lower grades. Domestic production of dolls in such grades accounts for only a minor part of the total output.
----------	41,404	----------	------	19.1	
----------	18,356	----------	------	18.3	
----------	49,838	----------	------	56.7	
----------	34,953	----------	------	66.8	
----------	----------	----------	------	------	
----------	30,718	----------	------	9.4	Imports from Japan are inexpensive mechanical toys; domestic production consists of the more expensive types. Before 1933 Germany was the principal source of imports. In 1933 total domestic production of mechanical toys was valued at about $4,000,000.
----------	16,959	----------	------	8.2	
----------	16,713	----------	------	10.2	
----------	21,106	----------	------	24.8	
----------	72,630	----------	------	80.0	
----------	107,417	----------	------	90.4	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
1513	Toy musical instruments.	40 percent or 70 percent.			1929[4]				
		70 percent	70.0	70.0	1931			$117,265	
		do	70.0	70.0	1932			148,787	
		do	70.0	70.0	1933			81,984	
		do	70.0	70.0	1934			91,386	
		do	70.0	70.0	1935[1]			48,711	
1513	Toys of cellulose compounds (celluloid, etc.) having movable parts.	60 percent			1929[4]				
		1 cent each and 60 percent.	97.8	98.2	1931	Number	7,458,542	197,267	$0.026
		do	109.1	110.3	1932	do	5,091,190	103,779	.020
		do	100.1	100.5	1933	do	3,203,378	79,874	.025
		do	101.9	102.0	1934	do	4,102,622	97,805	.024
		do	106.0	106.3	1935[1]	do	3,293,317	71,532	.022
1513	Toys of cellulose compounds (celluloid, etc.) not having movable parts.	60 percent			1929[4]				
		1 cent each and 50 percent.	93.8	101.3	1931	Number	2,626,899	59,978	.023
		do	113.4	115.8	1932	do	1,513,152	23,857	.016
		do	99.8	101.2	1933	do	1,037,726	20,829	.020
		do	102.6	102.8	1934	do	1,064,075	20,221	.019
		do	107.9	108.5	1935[1]	do	843,631	14,562	.017
1513	Toys and parts, of china, porcelain, parian, bisque, earthenware, and stoneware.	70 percent			1929[4]				
		do	70.0	70.0	1931			208,101	
		do	70.0	70.0	1932			97,185	
		do	70.0	70.0	1933			149,666	
		do	70.0	70.0	1934			229,321	
		do	70.0	70.0	1935[1]			97,076	
1513	Toys and parts of, n. s. p. f.	Various			1929				
		70 percent	70.0	70.0	1931			1,810,588	
		do	70.0	70.0	1932			1,237,590	
		do	70.0	70.0	1933			1,094,074	
		do	70.0	70.0	1934			1,144,592	
		do	70.0	70.0	1935[1]			645,899	
1516	Matches, having a stained, dyed, or colored stem.	40 percent			1929[4]				
		do	40.0	40.0	1931[44]	Pound	3,877,091	294,545	.076
		do	40.0	40.0	1932	Gross boxes.	1,347,230	357,080	.265
		do	40.0	40.0	1933	do	3,195,951	540,069	.169
		do	40.0	40.0	1934	do	1,955,383	331,245	.169
		do	40.0	40.0	1935[1]	do	80,668	15,505	.192

[1] 8 months.
[4] Not separately classified.
[44] Includes very small quantities of wax, wind, or book matches reported separately in subsequent years. (Note: 3,877.091 pounds are roughly equivalent to 850,000 gross boxes.)

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
					Imports consist of toy pianos, xylophones, horns, etc., used chiefly for children's amusement. Domestic production of these articles is very small, the bulk of consumption being supplied by imports. Prior to 1934, Germany was the principal source. Imports from that country have declined drastically and those from Japan have increased.
	$4,687			4.0	
	3,327			2.2	
	16,858			20.6	
	40,379			44.2	
	36,702			75.3	
6,777,391	177,400	$0.026	90.9	89.9	Imports include toys composed of celluloid, having movable parts, and made in a variety of sizes, styles, and colors. Rattles comprise the most important single item. Japan is practically the sole source of imports which supply a considerable part of domestic consumption of toys of this type. Comparatively small quantities of such articles are produced in the United States due mainly to the large amount of hand labor necessary in adjusting the movable parts.
4,986,210	99,081	.020	97.5	95.8	
3,191,117	78,762	.025	99.6	98.6	
4,099,430	97,576	.024	99.9	99.8	
3,267,926	70,638	.022	99.2	98.8	
2,276,600	44,389	.019	86.7	74.0	Imports, which are supplied almost entirely by Japan, consist principally of replicas of birds and animals of various kinds, sizes, and colors and are sold mainly in fixed-price chain stores. The celluloid material used in the manufacture of toys of this kind in the United States is supplied by four domestic companies, which also produce finished toys. The present duty is equal to about 100 percent ad valorem.
1,446,527	21,978	.015	95.6	92.1	
1,008,176	19,683	.020	97.2	94.5	
1,063,226	20,126	.019	99.9	99.5	
842,623	14,406	.017	99.9	98.9	
	155,469			74.7	Imports, the great bulk of which come from Japan, consist principally of tea sets and figures of bisque or porcelain. Similar articles are not produced in the United States.
	88,737			91.3	
	139,784			93.4	
	227,577			99.2	
	96,025			98.9	
	258,735			14.3	This group is comprised of metal toys, stuffed animals, toy tennis rackets, toy furniture, toy masks, tops, toy nursing bottles, soldier sets, and other miscellaneous toys. Imports represent approximately 10 percent of domestic consumption. Seasonal introduction of new ideas in toys constitutes one of the most important features of the trade. Prior to 1934 Germany was the principal source of imports under this classification.
	224,690			18.2	
	399,548			36.5	
	817,737			71.4	
	464,501			71.9	
8,424	1,272	.151	.2	.4	Almost all imported matches are of the strike-on-box type. Those having stained, dyed, or colored stems are under this classification; those having uncolored stems are classified elsewhere. (See comments below on "Matches, friction or lucifer * * *.") Strike-on-box matches, whether having colored or uncolored stems, are to a considerable degree purchased indiscriminately at the usual retail price of 1 cent per box. Before 1930 practically no imported matches had colored stems. From 1930 to 1933 imports of such matches increased substantially, and in 1933-34 they comprised the greater part of total imports. In 1932, most of the imports of colored matches came from the Union of Soviet Socialist Republics. Since that year, they have come chiefly from Japan. It is estimated that in 1934 total imports of matches with colored stems supplied about 25 percent of domestic consumption of strike-on-box matches, and about 4 percent of consumption of matches of all kinds. In the first 8 months of 1935, imports from all sources were negligible.
146,532	23,869	.163	10.9	6.7	
2,598,974	395,856	.152	81.3	73.3	
1,387,247	222,453	.160	70.9	67.2	
72,436	13,879	.192	89.8	89.5	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
1516	Matches, friction or lucifer, in boxes containing not more than 100 matches.	8 cents gross boxes.	24.5	22.0	1929	Gross boxes.	10,447,392	$3,404,755	$0.326
		20 cents gross boxes.	44.8	73.3	1931	...do.....	2,366,992	1,057,137	.447
		.....do.....	56.4	114.0	1932	...do.....	2,028,412	719,388	.355
		.....do.....	76.3	124.9	1933	...do.....	524,856	137,487	.262
		.....do.....	94.2	113.5	1934	...do.....	927,772	197,009	.212
		.....do.....	115.0	117.9	1935[1]	...do.....	1,187,906	206,596	.174
		17½ cents gross boxes.[66]	99.6	102.6	1935[1]	...do.....	155,258	27,271	.176
1518	Artificial and ornamental flowers, fruits, vegetables, grasses, grains, leaves, stems, or parts thereof, n.s.p.f.	60 percent.....	60.0	60.0	1929[4]	.....	.....	.....	.....
		.....do.....	60.0	60.0	1931	.....	.....	1,079,165	.....
		.....do.....	60.0	60.0	1932	.....	.....	659,417	.....
		.....do.....	60.0	60.0	1933	.....	.....	439,614	.....
		.....do.....	60.0	60.0	1934	.....	.....	515,668	.....
		.....do.....	60.0	60.0	1935[1]	.....	.....	333,504	.....
1519	Articles of fur wholly or partly manufactured, n.s.p.f.	40 percent.....	.....	.....	1929[4]	.....	.....	.....	.....
		50 percent.....	50.0	50.0	1931	.....	.....	40,079	.....
		.....do.....	50.0	50.0	1932	.....	.....	9,745	.....
		.....do.....	50.0	50.0	1933	.....	.....	10,632	.....
		.....do.....	50.0	50.0	1934	.....	.....	22,436	.....
		.....do.....	50.0	50.0	1935[1]	.....	.....	23,652	.....
1521	Fans, including palm-leaf if not decorated.	.....do.....	50.0	50.0	1929	.....	.....	55,472	.....
		.....do.....	50.0	50.0	1931	.....	.....	36,187	.....
		.....do.....	50.0	50.0	1932	.....	.....	29,085	.....
		.....do.....	50.0	50.0	1933	.....	.....	10,925	.....
		.....do.....	50.0	50.0	1934	.....	.....	24,976	.....
		.....do.....	50.0	50.0	1935[1]	.....	.....	27,610	.....
1527	Jewelry, and parts, of materials other than gold or platinum, valued over 20 cents, not over $1 per dozen pieces.	80 percent.....	80.0	80.0	1929[4]	.....	.....	.....	.....
		110 percent.....	110.0	110.0	1931	Dozen.....	439,619	209,156	.476
		.....do.....	110.0	110.0	1932	...do.....	202,022	98,122	.486
		.....do.....	110.0	110.0	1933	...do.....	179,632	88,668	.494
		.....do.....	110.0	110.0	1934	...do.....	117,627	58,416	.505
		.....do.....	110.0	110.0	1935[1]	...do.....	107,748	44,396	.412
1527	Jewelry, and parts, of materials other than gold or platinum, valued over $1, not over $5 per dozen pieces.	80 percent.....	80.0	80.0	1929[4]	.....	.....	.....	.....
		110 percent.....	110.0	110.0	1931	Dozen.....	194,725	349,144	1.79
		.....do.....	110.0	110.0	1932	...do.....	106,473	176,969	1.66
		.....do.....	110.0	110.0	1933	...do.....	59,265	95,317	1.61
		.....do.....	110.0	110.0	1934	...do.....	32,220	60,308	1.87
		.....do.....	110.0	110.0	1935[1]	...do.....	17,633	30,094	1.71
1528	Pearls and parts, not strung or set, except temporarily to facilitate transportation.	20 percent.....	20.0	20.0	1929	.....	.....	10,333,420	.....
		10 percent.....	10.0	10.0	1931	.....	.....	1,281,019	.....
		.....do.....	10.0	10.0	1932	.....	.....	552,908	.....
		.....do.....	10.0	10.0	1933	.....	.....	681,083	.....
		.....do.....	10.0	10.0	1934	.....	.....	477,018	.....
		.....do.....	10.0	10.0	1935[1]	.....	.....	436,442	.....
1528	Precious and semi-precious stones, other than diamonds, pearls, and emeralds, cut but not set.	20 percent.....	20.0	20.0	1929	.....	.....	5,327,689	.....
		10 percent.....	10.0	10.0	1931	.....	.....	1,200,155	.....
		.....do.....	10.0	10.0	1932	.....	.....	532,450	.....
		.....do.....	10.0	10.0	1933	.....	.....	510,995	.....
		.....do.....	10.0	10.0	1934	.....	.....	697,497	.....
		.....do.....	10.0	10.0	1935[1]	.....	.....	662,874	.....

[1] 8 months.

[4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
94,421	$34,379	$0.364	0.9	1.0	Matches imported under this classification, as is also the case with respect to colored stem matches (see comments above on "Matches, having a stained, dyed, or colored stem") are almost all of the strike-on-box type, in boxes each containing about 40 matches. Strike-on-box matches in such containers, whether having colored or uncolored stems, are usually retailed at 1 cent per box. Practically all matches imported before 1930 had uncolored stems. Imports of such matches under the act of 1922 averaged about 6,000,000 gross boxes annually, and in that period comprised at least 80 percent of domestic consumption of the strike-on-box type. In 1934, imported uncolored matches supplied about 15 percent of consumption of strike-on-box matches, and 2 percent of consumption of matches of all kinds. Japan has not been an important source of matches with uncolored stems. Before 1935, imports came largely from Sweden. In the first 8 months of 1935, in which imports from all sources were extremely small, most of the foreign supply came from the Union of Soviet Socialist Republics.
93,550	25,540	.273	4.0	2.4	
130,292	23,392	.180	6.4	3.3	
15,585	2,495	.160	3.0	1.5	
116,286	20,485	.176	12.5	10.4	
375,267	63,645	.170	31.6	30.8	
12,236	2,088	.171	7.9	7.7	
----------	----------	----------	------	------	
----------	11,460	----------	------	1.1	Imports are principally hand-made decorative paper flowers. Imports from Japan, relatively small compared with the total, consist chiefly of novelty glass and celluloid flowers and fruits. These novelties are not imported to any great extent from other countries nor are they produced in the United States except in minor quantities. Decorative paper flowers are produced in substantial quantities in the United States.
----------	5,717	----------	------	.9	
----------	10,125	----------	------	2.3	
----------	13,563	----------	------	2.6	
----------	23,503	----------	------	7.0	
----------	----------	----------	------	------	
----------	242	----------	------	.6	Imports from Japan consist largely of fur novelties such as small fur cats, dogs, and rabbits, which are used as toys and for display purposes. Imports from other countries include a wide variety of miscellaneous fur manufactures.
----------	165	----------	------	1.7	
----------	531	----------	------	5.0	
----------	16,565	----------	------	73.8	
----------	15,052	----------	------	63.6	
----------	----------	----------	------	------	
----------	25,036	----------	------	45.1	Imports consist of hand fans (folding and screen) made from paper, cotton, silk, straw, or feathers. The great bulk of domestic fans are machine manufactured by advertising and calendar companies and bear the printed advertisements of the customers. Imported fans are made principally by hand, are not used for advertising purposes, and compete only to a limited extent with domestic fans.
----------	16,000	----------	------	44.2	
----------	9,585	----------	------	32.9	
----------	5,917	----------	------	54.2	
----------	14,386	----------	------	57.6	
----------	17,508	----------	------	63.4	
----------	----------	----------	------	------	
74,517	29,200	.392	17.0	14.0	Imports consist of rings, bracelets, necklaces, and similar articles. Imports from Japan are confined to jewelry of the low-priced type. The bulk of domestic production is of a quality that commands much higher prices in the United States. Total imports are small relative to total domestic production and exports.
23,023	8,136	.353	11.4	8.3	
25,455	11,250	.442	14.2	12.7	
56,567	28,402	.502	48.9	48.6	
64,776	25,450	.393	60.1	57.3	
----------	----------	----------	------	------	
9,429	14,446	1.53	4.8	4.1	Imports, consisting of jewelry valued over $1 but not over $5 per dozen pieces, come principally from Czechoslovakia. The average dutiable value of imports from all countries is about $1.70 per dozen pieces and the average dutiable value of imports from Japan about $1.65. Total imports of jewelry of all types are equivalent to 1 or 2 percent of domestic production.
2,204	4,028	1.83	2.1	2.3	
2,549	3,770	1.48	4.3	4.0	
8,690	13,697	1.57	27.0	22.7	
2,344	3,878	1.65	13.3	12.9	
----------	132,347	----------	------	1.3	Imports consist of both natural and cultured pearls. Cultured pearls are produced only in Japan and imports from that country consist almost entirely of that type. There is no domestic production of cultured pearls and the domestic production of natural pearls is negligible.
----------	65,387	----------	------	5.1	
----------	61,418	----------	------	11.1	
----------	73,458	----------	------	10.8	
----------	157,524	----------	------	33.0	
----------	70,381	----------	------	16.1	
----------	----------	----------	------	------	
----------	306,874	----------	------	5.8	The bulk of the imports consists of precious stones (sapphires, rubies, etc.), other than diamonds, pearls, and emeralds. France, Germany, and the United Kingdom are the principal suppliers under this classification. Imports from Japan are confined largely to jade, topaz, quartz, and other semiprecious stones peculiar to the Orient. The domestic production of precious and semiprecious stones is small.
----------	403,849	----------	------	33.6	
----------	145,022	----------	------	27.2	
----------	63,309	----------	------	12.4	
----------	17,585	----------	------	2.5	
----------	8,212	----------	------	1.2	

[61] Rate changed by trade agreement between the United States and Sweden, effective Aug 5, 1935.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1528	Imitation pearls and half pearls, hollow or filled.	20 percent	20.0	20.0	1929			$71,857	
		do	20.0	20.0	1931			17,114	
		do	20.0	20.0	1932			9,426	
		do	20.0	20.0	1933			4,509	
		do	20.0	20.0	1934			14,934	
		do	20.0	20.0	1935[1]			10,561	
1529	Wearing apparel of cotton, embroidered, tamboured, appliqued, or ornamented with beads or spangles, n. s. p. f.	75 percent			1929[4]				
		90 percent	90.0	90.0	1931			[66] 332,623	
		do	90.0	90.0	1932			[66] 159,120	
		do	90.0	90.0	1933			[66] 95,032	
		do	90.0	90.0	1934			[66] 116,261	
		do	90.0	90.0	1935[1]			58,701	
1529	Articles of cotton, other than wearing apparel, wholly or in part of lace, not elsewhere specified.	do	90.0	90.0	1929			1,807,781	
		do	90.0	90.0	1931			615,672	
		do	90.0	90.0	1932			326,391	
		do	90.0	90.0	1933			214,012	
		do	90.0	90.0	1934			216,945	
		do	90.0	90.0	1935[1]			189,624	
1529	Articles or fabrics of cotton, other than wearing apparel, embroidered, tamboured, appliqued, or ornamented with beads or spangles, n. s. p. f.	75 percent	75.0	75.0	1929			[67] 812,603	
		90 percent	90.0	90.0	1931			[67] 942,467	
		do	90.0	90.0	1932			[67] 809,026	
		do	90.0	90.0	1933			[67] 966,809	
		do	90.0	90.0	1934			[67] 1,078,199	
		do	90.0	90.0	1935[1]			743,565	
1529	Braids of cotton, loom-woven and ornamented in weaving or made by hand or on braid knitting, or lace machines, n. s. p. f.	do	90.0	90.0	1929	Pound	145,659	154,305	$1.059
		do	90.0	90.0	1931	do	52,494	47,134	.898
		do	90.0	90.0	1932	do	6,513	4,218	.648
		do	90.0	90.0	1933	do	6,598	2,858	.433
		do	90.0	90.0	1934	do	49,717	21,421	.431
		do	90.0	90.0	1935[1]	do	20,893	7,583	.363
1529	Articles or fabrics of flax, hemp, or ramie, other than wearing apparel, embroidered, tamboured, appliqued, or ornamented with beads or spangles, n. s. p. f.	75 percent	75.0	75.0	1929			5,353,196	
		90 percent	90.0	90.0	1931			3,129,071	
		do	90.0	90.0	1932			2,334,845	
		do	90.0	90.0	1933			2,198,071	
		do	90.0	90.0	1934			2,091,984	
		do	90.0	90.0	1935[1]			1,185,798	
1529	Wearing apparel of silk, not knit or crocheted, embroidered, tamboured, appliqued, or ornamented, with beads or spangles, n. s. p. f.	75 percent	75.0	75.0	1929			[68] 2,767,100	
		90 percent	90.0	90.0	1931			[68] 948,186	
		do	90.0	90.0	1932			[68] 326,877	
		do	90.0	90.0	1933			[68] 314,861	
		do	90.0	90.0	1934			[68] 338,525	
		do	90.0	90.0	1935[1]			[68] 164,727	

[1] 8 months.
[2] Less than one-tenth of 1 percent.
[4] Not separately classified.
[66] In addition imports entered free of duty were as follows: (*a*) From the Philippine Islands: 1931, $2,043,565; 1932, $2,660,402; 1933, $1,830,874; 1934, $2,120,684. (*b*) From Puerto Rico, practically all of which were embroidered: 1931, $10,270,081; 1932, $7,286,001; 1933, $10,550,997; 1934, $10,548,826.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
	$500			0.7	Imports from Japan are used principally for earrings. The domestic production of comparable imitation pearls is small; the bulk of the domestic production consists of high-grade imitation pearls which sell at higher prices in the United States than the Japanese articles.
	151			.9	
	1,111			11.8	
	987			21.9	
	13,393			89.7	
	10,038			95.0	
					The bulk of domestic consumption of embroidered cotton wearing apparel is supplied by shipments of hand-embroidered apparel from Puerto Rico and the Philippine Islands and by apparel machine-embroidered in the United States. Imports are unimportant in comparison and consist chiefly of apparel having style value, as that from France, or having distinctive native style and design, as that from Japan or Hungary. France is the principal source of imports of wearing apparel imported under this classification.
	6,999			2.1	
	5,391			3.4	
	17,027			17.9	
	19,130			16.5	
	12,561			21.4	
	12,217			.9	Japan is not an important producer of lace or lace articles and is not an important factor in United States imports. The character of imports from Japan under this classification is not known. China supplies the larger part of imports under this classification, with France, Belgium, United Kingdom, and Japan as secondary sources.
	22,686			3.7	
	8,397			2.6	
	17,143			8.0	
	17,729			8.2	
	15,605			8.2	
	7,991			1.0	Japan is relatively unimportant as a producer of embroidered articles and fabrics and as a source of United States imports under this classification. China and the Azores and Madeira Islands are principal sources of imports of these embroidered articles and fabrics of cotton, supplying hand embroideries, and Switzerland and Germany are the next important, supplying chiefly machine-made embroideries.
	15,322			1.6	
	14,264			1.8	
	18,042			1.9	
	26,255			2.4	
	41,273			5.6	
14	11	$0.786	(1)	(1)	This classification covers a wide variety of articles ranging from shoe lacings to lace made on the Barmen lace-braiding machine. Imports from Japan, however, consist almost wholly of cotton shoe laces of braided structure. Prior to 1933, imports consisted chiefly of Barmen laces from Germany and other fancy braids from Germany, Switzerland, and Czechoslovakia. Domestic production of "cotton shoe and corset lacings", the bulk of which is made of braided structure, amounted to $4,727,000 in 1933. Production in 1932, by quantity, was estimated at 3,500,000 pounds. Imports are negligible in comparison.
5	9	1.800	(1)	(1)	
6,121	2,325	.380	92.8	81.4	
47,783	19,329	.405	96.1	90.2	
20,792	7,402	.356	99.5	97.6	
	14,824			.3	Imports under this classification consist chiefly of hand-embroidered, made-up household articles, particularly of linen, but it includes small quantities of embroidered fabrics. Japan is an unimportant source of imports, supplying less than 2½ percent of the total in 1934-35. The larger part of imports comes from China, with substantial quantities from the Azores and Madeira Islands, Italy, and the Canary Islands. Imports, although distinctive, compete to a certain extent with domestic machine-embroidered articles and shipments of hand-embroidered articles from Puerto Rico.
	14,395			.5	
	5,967			.3	
	22,951			1.0	
	42,001			2.0	
	29,753			2.5	
	153,468			5.5	France is the principal source of imports of silk wearing apparel, embroidered, etc., although imports from that country have declined drastically since 1929. Imports from Japan consist chiefly of kimonos, pajamas, pajama suits, coolie coats, mandarin coats, and robes, embroidered by hand and distinctively oriental in style and design. Substantial amounts of hand-embroidered silk wearing apparel are received in the United States from Puerto Rico and the Philippine Islands. There is considerable domestic production of machine embroidered silk wearing apparel but no statistics are available.
	61,309			6.5	
	34,905			10.7	
	76,479			24.3	
	114,322			33.8	
	56,827			34.5	

[1] In addition imports entered free of duty were as follows: (*a*) From the Philippine Islands: 1929, $923,175; 1931, $267,342; 1932, $231,693; 1933, $37,999; 1934, $139,191. (*b*) From Puerto Rico, practically all of which were embroidered: 1929, $347,173; 1931, $708,063; 1932, $887,602; 1933, $549,139; 1934, $491,003.

[2] In addition imports entered free of duty were as follows: (*a*) From the Philippine Islands: 1929, $185,379; 1931, $33,601; 1932, $18,191; 1933, $45,146; 1934, $35,716. (*b*) From Puerto Rico, practically all of which were embroidered: 1929, not separately reported; 1931, not separately reported; 1932, $1,340,509; 1933, $654,345; 1934, $116,745.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
1529	Articles or fabrics of silk other than wearing apparel, embroidered, tamboured, appliqued, or ornamented with beads or spangles, n. s. p. f.	75 percent	75.0	75.0	1929			$1,410,924	
		90 percent	90.0	90.0	1931			343,794	
		do	90.0	90.0	1932			117,567	
		do	90.0	90.0	1933			112,688	
		do	90.0	90.0	1934			95,778	
		do	90.0	90.0	1935[1]			47,734	
1529	Wearing apparel of rayon or other synthetic textile, embroidered, n. s. p. f.	75 percent			1929[2]				
		90 percent			1931[2]				
		do	90.0	90.0	1932			36,492	
		do	90.0	90.0	1933			130,102	
		do	90.0	90.0	1934			313,318	
		do	90.0	90.0	1935[1]			156,969	
1529	Articles and fabrics, of rayon or other synthetic textile, other than wearing apparel, embroidered, tamboured, appliqued, or ornamented with beads, bugles, or spangles, n. s. p. f.	75 percent			1929[2]				
		90 percent	90.0	90.0	1931			12,935	
		do	90.0	90.0	1932			9,492	
		do	90.0	90.0	1933			19,778	
		do	90.0	90.0	1934			32,473	
		do	90.0	90.0	1935[1]			24,834	
1530	Rubber-soled footwear with fabric uppers.	35 percent			1929[2]				
		do			1931[2]				
		do	35.0	35.0	1932	Pair	2,930,326	348,528	$0.119
		do	35.0	35.0	1933	do	4,438,119	702,529	.158
		do	35.0	35.0	1934	do	1,337,667	331,745	.248
		do	35.0	35.0	1935[1]	do	589,900	158,365	.268
1530	Footwear, other than rubber-soled, with uppers of wool, cotton, ramie, animal hair, fiber, rayon, or other synthetic textile, silk or substitutes.	30 percent			1929[2]				
		35 percent			1931[2]				
		do	35.0	35.0	1932	Pair	1,765,252	287,219	.166
		do	35.0	35.0	1933	do	2,088,555	248,091	.119
		do	35.0	35.0	1934	do	2,557,314	361,614	.141
		do	35.0	35.0	1935[1]	do	1,912,399	291,066	.152
1531	Bags, baskets, belts, satchels, pocketbooks, and other boxes and cases, and manufactures of leather, rawhide, or parchment.	30 percent	30.0	30.0	1929			4,653,490	
		35 percent	35.0	35.0	1931			2,275,090	
		do	35.0	35.0	1932			1,393,806	
		do	35.0	35.0	1933			861,681	
		do	35.0	35.0	1934			668,231	
		do	35.0	35.0	1935[1]			454,923	
1535	Fishing baskets or creels and fishing tackle and parts, n. s. p. f., except fishing lines, nets, and seines.	45 percent	45.0	45.0	1929			179,032	
		do	45.0	45.0	1931			45,182	
		do	45.0	45.0	1932			25,216	
		do	45.0	45.0	1933			29,499	
		do	45.0	45.0	1934			51,998	
		do	45.0	45.0	1935[1]			43,000	
1537	Manufactures of bones, hoofs, and horns, n. s. p. f.	25 percent	25.0	25.0	1929			102,722	
		do	25.0	25.0	1931			57,247	
		do	25.0	25.0	1932			41,170	
		do	25.0	25.0	1933			56,721	
		do	25.0	25.0	1934			61,990	
		do	25.0	25.0	1935[1]			41,961	

[1] 8 months.
[2] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
----------	$62,237	----------	------	4.4	Imports consist of a variety of made-up articles of silk, such as mats, runners, panels, pillow covers, bags, hangings, and screens, together with some embroidered fabrics. Imports from Japan consist chiefly of panels, hangings, screens, and mats. These articles are of silk, embroidered by hand, and usually distinctively oriental in design. China was the principal source of imports in 1934, followed by France and Japan.
----------	21,599	----------	------	6.3	
----------	11,463	----------	------	9.8	
----------	14,538	----------	------	12.9	
----------	13,056	----------	------	13.6	
----------	18,391	----------	------	38.5	
----------	----------	----------	------	------	Imports are in large part from Japan and, it is believed, consist principally of embroidered garments of oriental type and design, particularly kimonos and pajamas, similar to the silk articles long imported from Japan. Domestic production of rayon wearing apparel is very large; statistics are not available, nor is it known what portion of production is embroidered.
----------	25,195	----------	------	69.0	
----------	124,178	----------	------	95.4	
----------	307,824	----------	------	98.2	
----------	153,692	----------	------	97.9	
----------	----------	----------	------	------	Of total imports of "articles and fabrics embroidered, etc." of all materials, imports of rayon are the least important, constituting about 1 percent of the total. Imports consist chiefly of made-up household articles. Those from Japan are distinctively oriental in style and design. Domestic production is chiefly of cotton, silk, and linen, but includes some rayon.
----------	1,398	----------	------	10.8	
----------	3,752	----------	------	39.5	
----------	11,321	----------	------	57.2	
----------	12,494	----------	------	38.5	
----------	15,250	----------	------	61.4	
----------	----------	----------	------	------	Imports consist chiefly of tennis oxfords and beach sandals. Substantial imports from Japan began in 1932. Following an investigation under sec. 336 of the Tariff Act of 1930, which resulted in the assessment of higher duties after Mar. 3, 1933, imports of footwear of this type declined substantially. Domestic production was 26,000,000 pairs in 1933.
2,351,622	244,489	$0.104	80.3	70.1	
2,320,673	331,342	.143	52.3	47.2	
1,306,263	299,941	.230	97.7	90.4	
552,907	121,938	.221	93.7	77.0	
----------	----------	----------	------	------	Imports from Japan consist largely of straw-soled slippers with straw or cotton uppers, slippers with wooden soles, and cotton uppers, silk baby bootees, etc. The unit values of these imports are low. Very little footwear similar to that imported from Japan is produced in the United States. Approximately one-third of the total imports from Japan, in the first 8 months of 1935, was entered at Hawaii; almost half of the remainder was entered at Pacific coast ports.
1,292,360	87,639	.068	73.2	30.5	
1,668,300	92,743	.056	79.9	37.4	
2,096,118	149,224	.071	82.0	41.3	
1,559,160	95,358	.061	81.5	32.8	
----------	49,282	----------	------	1.1	Imports from Japan consist of jewelry boxes, purses, billfolds, dice sets, handbags, watch boxes, crucifix cases, dog collars, etc. Japan is a minor source of imports under this classification, the United Kingdom, France, Italy, and Germany being the principal suppliers. Dutiable values of imports from Japan are lower than dutiable values of corresponding articles imported from other countries. Domestic production of "pocketbooks, purses, and card cases" amounted to $28,000,000 in 1933, and production of "leather goods not elsewhere specified" to $18,000,000.
----------	42,721	----------	------	1.9	
----------	26,160	----------	------	1.9	
----------	33,403	----------	------	3.9	
----------	44,307	----------	------	6.6	
----------	31,326	----------	------	6.9	
----------	70,579	----------	------	39.4	Imports, most of which are supplied by Japan, have declined materially since 1929. The bulk of the imports from that country consists of low-priced reed fishing baskets, but some high-priced willow baskets are also imported. The domestic production of fishing baskets is very small and consists almost entirely of split willow baskets of the highest grade. More than 80 percent of the imports during the first 8 months of 1935 entered at Pacific coast ports and Hawaii.
----------	20,126	----------	------	64.5	
----------	18,854	----------	------	74.8	
----------	22,182	----------	------	75.2	
----------	39,140	----------	------	75.3	
----------	34,484	----------	------	80.2	
----------	32,365	----------	------	31.5	Imports consist principally of articles such as brooches, bag tops, ear and finger rings, mah jong sets, watch charms, napkin rings, and crochet needles. (Buttons, combs, and brush handles of bone and horn are not covered by this classification.) Imports appear to be largely novelty, noncompetitive articles.
----------	21,908	----------	------	38.3	
----------	11,693	----------	------	28.3	
----------	12,877	----------	------	22.7	
----------	34,886	----------	------	56.3	
----------	25,681	----------	------	61.2	

[66] Basis of duty assessment changed from foreign value to American selling price, effective Mar. 3, 1933.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
1537	Manufactures of chip, n. s. p. f., and manufactures of chip roping.	25 per cent	------	------	1929 [4]	----------	----------	----------	-------
		---do	25.0	25.0	1931	----------	----------	$215,776	-------
		---do	25.0	25.0	1932	----------	----------	96,212	-------
		---do	25.0	25.0	1933	----------	----------	96,591	-------
		---do	25.0	25.0	1934	----------	----------	172,187	-------
		---do	25.0	25.0	1935 [1]	----------	----------	113,170	-------
1537	Manufactures of straw, seagrass, and grass, n. s. p. f.	---do	25.0	25.0	1929 [70]	----------	----------	521,967	-------
		---do	25.0	25.0	1931	----------	----------	169,441	-------
		---do	25.0	25.0	1932	----------	----------	61,096	-------
		---do	25.0	25.0	1933	----------	----------	70,440	-------
		---do	25.0	25.0	1934	----------	----------	92,184	-------
		---do	25.0	25.0	1935 [1]	----------	----------	62,938	-------
1537	Rubber boots and shoes (all rubber).	---do	------	------	1929 [71]	----------	----------	----------	-------
		---do	------	------	1931 [71]	----------	----------	----------	-------
		---do	25.0	25.0	1932	Pair	918,430	247,969	$0.270
		---do [69]	25.0	25.0	1933	---do	268,428	76,279	.284
		---do	25.0	25.0	1934	---do	187,800	26,583	.142
		---do	25.0	25.0	1935 [1]	---do	38,467	10,399	.270
1537	Rubber erasers	---do	------	------	1929 [71]	----------	----------	----------	-------
		---do	------	------	1931 [71]	----------	----------	----------	-------
		---do	------	------	1932 [71]	----------	----------	----------	-------
		---do	------	------	1933 [71]	----------	----------	----------	-------
		---do	25.0	25.0	1934	Pound	281,547	25,811	.092
		---do	25.0	25.0	1935 [1]	---do	370,095	35,386	.096
1537	Manufactures of rubber, n. s. p. f.	---do	25.0	25.0	1929	----------	----------	717,828	-------
		---do	25.0	25.0	1931	----------	----------	459,599	-------
		---do	25.0	25.0	1932	----------	----------	229,819	-------
		---do	25.0	25.0	1933	----------	----------	276,257	-------
		---do	25.0	25.0	1934	----------	----------	284,886	-------
		---do	25.0	25.0	1935 [1]	Pound	954,751	160,220	.168
1537	Combs of cellulose compounds (cellulose, etc.), valued $4.50 or less per gross.	60 percent	60.0	60.0	1929 [73]	Number	17,524,390	585,255	.033
		1 cent each and 25 percent.	64.9	67.7	1931	---do	10,367,587	259,995	.025
		---do	84.0	91.4	1932	---do	10,862,059	183,957	.017
		---do	90.2	92.4	1933	---do	14,779,553	226,821	.015
		---do	88.8	88.9	1934	---do	16,988,120	266,357	.016
		---do	95.6	95.8	1935 [1]	---do	12,418,844	175,957	.014
1537	Combs of cellulose compounds (celluloid, etc.), valued over $4.50 per gross.	60 percent	------	------	1929 [4]	----------	----------	----------	-------
		2 cents each and 35 percent.	70.4	74.2	1931	Number	974,263	54,980	.056
		---do	72.0	79.0	1932	---do	511,041	27,596	.054
		---do	76.9	83.6	1933	---do	485,720	23,163	.048
		---do	84.4	86.1	1934	---do	542,484	21,977	.040
		---do	80.3	81.9	1935 [1]	---do	158,804	7,004	.044
1538	Shells and mother-of-pearl, engraved, cut, ornamented, or manufactured.	35 percent	35.0	35.0	1929	----------	----------	45,467	-------
		---do	35.0	35.0	1931	----------	----------	19,970	-------
		---do	35.0	35.0	1932	----------	----------	9,448	-------
		---do	35.0	35.0	1933	----------	----------	22,008	-------
		---do	35.0	35.0	1934	----------	----------	28,844	-------
		---do	35.0	35.0	1935 [1]	----------	----------	21,534	-------

[1] 8 months.
[4] Not separately classified.
[69] Basis of duty assessment changed from foreign value to American selling price, effective Mar. 3, 1933.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
----------	----------	----------	------	------	Imports, practically all of which come from Japan, are comprised principally of Christmas wreaths, bells, stars, wrapping mats, candy baskets, and wall splash mats. There is practically no domestic production of articles made from chip or chip roping.
----------	$211,438	----------	------	98.0	
----------	95,301	----------	------	99.0	
----------	95,791	----------	------	99.1	
----------	171,006	----------	------	99.3	
----------	113,158	----------	------	99.9	
----------	98,657	----------	------	18.9	Imports from Japan consist largely of hand-made articles, such as plain floor mats, slippers, bags, bast nets, bottle covers, and plain baskets. Domestic production consists largely of machine-made seat covers, drinking straws, and mats. Very little competition appears to exist between imported and domestic articles. Other important sources of imports under this classification are Germany and the Netherlands.
----------	45,340	----------	------	26.8	
----------	8,977	----------	------	14.7	
----------	13,129	----------	------	18.6	
----------	27,559	----------	------	29.9	
----------	24,763	----------	------	39.3	
----------	----------	----------	------	------	This classification includes a variety of types of all-rubber footwear such as rubber boots, arctics, gaiters, rubbers, and bathing shoes. Substantial imports from Japan began in 1932. An investigation under section 336 of the Tariff Act of 1930 resulted, Mar. 3, 1933, in increased duties, and imports of types of footwear formerly imported practically ceased. Thereafter, imports from Japan consisted principally of types not made domestically. Domestic production of all-rubber footwear was 34,000,000 pairs in 1933.
237,166	31,425	$0.133	25.8	12.7	
250,016	67,706	.271	93.1	88.8	
180,582	23,507	.130	96.2	88.4	
21,793	2,576	.118	56.7	24.8	
----------	----------	----------	------	------	A large part of the imported erasers consists of figures of birds, animals, clocks, etc., types not produced in the United States. A substantial part of the domestic output consists of plug erasers (for insertion in pencils) and typewriter erasers, types which are not imported. The imported erasers are used almost entirely by children. Exports on a quantity basis amounted to 37 percent of domestic production in 1934.
----------	----------	----------	------	------	
----------	----------	----------	------	------	
280,780	25,673	.091	99.7	99.5	
365,504	34,918	.096	98.8	98.7	
----------	6,541	----------	------	.9	Statistics from year to year are not comparable because as articles become important they are given separate statistical classifications. In 1934, imports from Japan consisted of a great variety of novelties, such as bathing equipment (sea lions, swans, etc.), play daggers, and balls, as well as a variety of utility articles such as aprons, bands, bathing caps, blankets, and centers for golf balls. A number of the articles included in this classification are produced in large volume in the United States.
----------	34,209	----------	------	7.4	
----------	38,027	----------	------	16.5	
----------	120,964	----------	------	43.8	
----------	162,777	----------	------	57.1	
840,045	99,746	.119	88.0	62.3	
1,863,717	71,420	.038	10.6	12.2	Imports from Japan are celluloid combs which retail in the United States usually at 5 or 10 cents each. There is a considerable domestic production of combs retailing at 10 cents but the larger proportion of the domestic production consists of higher priced combs. Imports from Japan have increased since 1931, chiefly at the expense of Germany. Imports of the 10-cent grade of celluloid combs are larger in quantity than the comparable domestic production. The ad valorem equivalent of the present duty on Japanese imports amounted to about 95 percent in the first 8 months of 1935.
2,767,074	64,865	.023	26.7	24.9	
7,977,473	120,066	.014	73.4	65.3	
13,900,824	206,132	.015	94.1	90.9	
16,928,661	264,806	.014	99.6	99.4	
12,330,304	174,067	.014	99.3	98.9	
433,199	22,106	.051	44.5	40.2	Imports from Japan are celluloid combs which retail in the United States usually at 10 cents or more each. A considerable proportion of the domestic production retails at similar prices. Imports of combs within this price range are fairly large relative to domestic production. The equivalent ad valorem of the present duty on imports from Japan is in excess of 80 percent.
383,972	17,448	.045	75.1	63.2	
340,983	14,036	.041	70.2	60.6	
535,524	20,944	.039	98.9	95.3	
157,161	6,702	.043	99.0	95.7	
----------	4,258	----------	------	9.4	Both imports and domestic production consist of a wide variety of novelties such as pin and ash trays, birds and animals, inlaid crosses, vanity cases, manicure sets, and ornaments of various kinds. Domestic production is estimated at $575,000 for 1934.
----------	4,535	----------	------	22.7	
----------	2,091	----------	------	22.1	
----------	13,636	----------	------	62.0	
----------	20,095	----------	------	69.7	
----------	15,761	----------	------	73.2	

[70] Classification in 1929 did not include "seagrass". Imports of "seagrass" since 1929 have been practically negligible.
[71] Included in "Rubber manufactures, n. s. p. f.".
[72] Includes small quantities of combs valued over $11.50 per gross.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
1541	Harmonicas	40 percent			1929 [4]				
		do			1931 [74]				
		do			1932 [74]				
		do			1933 [74]				
		do			1934 [74]				
		do	40.0	40.0	1935 [1]	Number	5,924,728	$479,156	$0.081
1541	Musical instruments, n. s. p. f., except percussion, wind, and string instruments, not elsewhere specified.	do			1929 [4]				
		do	40.0	40.0	1931 [74]			1,089,825	
		do	40.0	40.0	1932 [74]			815,825	
		do	40.0	40.0	1933 [74]			839,016	
		do	40.0	40.0	1934 [74]			1,677,864	
		do	40.0	40.0	1935 [1]			107,249	
1542	Records for phonographs and similar articles.	30 percent	30.0	30.0	1929	Number	218,836	92,810	.424
		do	30.0	30.0	1931	do	173,678	81,377	.469
		do	30.0	30.0	1932	do	148,581	50,115	.337
		do	30.0	30.0	1933	do	224,415	81,883	.365
		do	30.0	30.0	1934	do	180,178	75,776	.421
		do	30.0	30.0	1935 [1]	do	110,409	43,980	.398
1549	Pencils stamped with names other than manufacturers' or the manufacturers' trade name or trademark.	50 cents gross and 25 percent.	41.9		1929	Gross	7,791	23,097	2.96
		do	46.5		1931	do	7,176	16,692	2.33
		do	43.4	35.0	1932	do	3,129	8,486	2.71
		do	169.7	257.5	1933	do	96,374	33,308	.346
		do	180.7	228.3	1934	do	108,441	34,831	.321
		do	164.4	255.3	1935 [1]	do	27,921	10,018	.359
1550	Mechanical pencils other than of cellulose compounds (celluloid, etc.).	45-cents gr. and 20 percent.	24.9	26.5	1929 [76 77]	do	12,616	115,456	9.15
		45-cents gr. and 25 percent.	33.8	106.6			19,700	100,390	5.10
		45-cents gr. and 40 percent.	49.6	45.0	1931 [77]	do	39,535	184,893	4.68
		do	49.4	67.1	1932	do	26,675	127,581	4.78
		do	53.8	66.1	1933	do	23,418	76,448	3.26
		do	58.3	61.1	1934	do	36,837	90,463	2.46
		do	62.4	68.3	1935 [1]	do	32,569	65,471	2.01
1551	Motion picture positive films (motion pictures) including prints or duplicates.	1-cent linear foot.	27.5	20.3	1929	Linear foot.	4,907,345	178,568	.036
		do	27.9	29.5	1931	do	5,926,403	212,154	.036
		do	33.7	39.9	1932	do	3,967,074	117,561	.030
		do	24.2	22.4	1933	do	3,916,596	161,778	.041
		do	23.7	15.8	1934	do	4,222,687	177,968	.042
		do	22.5	15.5	1935 [1]	do	2,768,990	122,885	.044
1552	Smokers' articles, n. s. p. f.	60 percent	60.0	60.0	1929			488,111	
		do	60.0	60.0	1931			361,243	
		do	60.0	60.0	1932			265,499	
		do	60.0	60.0	1933			295,675	
		do	60.0	60.0	1934			338,503	
		do	60.0	60.0	1935 [1]			204,329	

[1] 8 months.
[2] Less than 1/10 of 1 percent.
[4] Not separately classified.
[74] Included in "musical instruments, n. s. p. f." for years prior to 1935, but valued at more than $12,000 in 1934.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
					Imports came almost exclusively from Germany until 1933. In that year imports began to enter in substantial quantities from Japan. The average unit value of harmonicas from Japan is materially below the average value of those from Germany. There is no domestic production of harmonicas.
1,446,141	$40,914	$0.028	24.4	8.5	
					Imports consist of miscellaneous musical instruments, the majority of which (although not toys) are not suitable for professional use. Before 1934, the statistics include imports of harmonicas, the principal item then imported both from Japan and from all countries taken as a whole. Imports for 1935, which do not include harmonicas, consist chiefly of bugles, flutes, xylophones and ocarinos (practically all low-priced instruments). Domestic production, which is substantial, is comprised mainly of high-grade instruments.
	4,360			.4	
	3,882			.5	
	15,496			1.8	
	84,260			5.0	
	30,111			28.1	
110,966	34,881	.314	50.7	37.6	Imports consist almost exclusively of phonograph records. The bulk of the imported records are of special types which appeal to nationals of foreign countries residing in the United States. Considerably over half the imports from Japan during the first 8 months of 1935 entered at Hawaii and practically all the remainder entered at San Francisco and Los Angeles. Total imports are equivalent to about 2 percent of domestic production and are less than total exports.
58,699	17,441	.297	33.8	21.4	
70,173	13,382	.191	47.2	26.7	
97,438	16,137	.166	43.4	19.7	
72,334	14,387	.199	40.1	19.0	
43,614	7,960	.183	39.5	18.3	
					Stamped pencils do not contain the name or trade name of the manufacturer. These pencils are usually stamped with the name or trade name of the domestic concern which purchases them and are distributed by the concern as advertisements. Imports are fairly small relative to the domestic production of "stamped" pencils. Japan is a minor source of imports of pencils other than "stamped" pencils.
1	5	5.00	(1)	(1)	
91,502	19,680	.215	94.9	59.1	
104,879	25,794	.246	96.7	74.1	
26,161	5,680	.217	93.7	56.7	
218	1,519	6.97	12.0	1.3	Imports from Japan retail in the United States at 10 to 25 cents each. The domestic production within this price range is substantial but the larger proportion of the domestic production consists of higher priced pencils and imports of these grades are negligible. Imports from Japan have increased materially since 1932, while imports from Germany have declined. Total imports (cellulose and other) are equivalent to about 25 percent of the total domestic production by quantity and 2 percent by value. Total imports are much smaller in value (though larger in quantity) than exports.
1,602	884	.55	8.1	.9	
1,258	11,348	9.02	3.2	6.1	
2,159	3,583	1.66	8.1	2.8	
14,517	25,059	1.73	62.0	32.8	
34,569	73,684	2.13	93.8	81.5	
30,675	48,749	1.59	94.2	74.5	
490,873	24,146	.049	10.0	13.5	Imports from Japan are ordinary motion picture news reels, shorts, or features. Such films are usually made abroad by or for domestic concerns for exhibition in the United States. Large quantities of raw or unexposed film are exported from the United States to Japan.
548,506	18,578	.034	9.3	8.8	
850,213	21,282	.025	21.4	18.1	
764,154	34,163	.045	19.5	21.1	
723,667	45,685	.063	17.1	25.7	
461,386	29,857	.065	16.7	24.3	
	103,920			21.3	Imports are comprised principally of ash trays and cigarette boxes of an individual or distinctive character. Domestic production consists mainly of smokers' stands, and table and automobile lighters.
	163,962			45.4	
	124,868			47.0	
	191,931			64.9	
	241,030			71.2	
	130,137			63.7	

[75] The bulk of imports consists of "harmonicas" for years prior to 1935.
[76] Mechanical pencils of base metal, not plated with gold, silver, or platinum.
[77] Mechanical pencils, n. s. p. f.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1553	Thermostatic bottles, carafes, jars, jugs, and other containers, blanks, and pistons.	Various [78]	128.4	36.9	1929	Number	276,537	$51,400	$0.186
		do	143.4	55.6	1931	do	259,202	42,969	.166
		do	182.0	271.5	1932	do	246,664	28,795	.117
		do	194.5	223.2	1933	do	470,243	52,449	.114
		do	175.7	180.1	1934	do	515,468	63,368	.123
		do	177.2	192.2	1935 [1]	do	302,052	36,877	.122
1554	Umbrellas, parasols, and sunshades, covered with material other than paper or lace, not embroidered or appliqued.	40 percent	40.0	40.0	1929	do	1,254,540	211,404	.169
		do	40.0	40.0	1931	do	591,588	77,477	.148
		do	40.0	40.0	1932	do	779,668	84,766	.109
		do	40.0	40.0	1933	do	886,284	77,118	.087
		do	40.0	40.0	1934	do	1,029,792	69,147	.067
		do	40.0	40.0	1935 [1]	do	1,902,348	122,575	.064
1554	Walking canes	do			1929 [4]				
		do	40.0	40.0	1931	Dozen	56,644	28,548	.504
		do	40.0	40.0	1932	do	40,235	16,285	.405
		do	40.0	40.0	1933	do	90,863	28,061	.309
		do	40.0	40.0	1934	do	126,708	40,911	.323
		do	40.0	40.0	1935 [1]	do	167,789	31,223	.186
1554	Handles and sticks for umbrellas, parasols, sunshades, and walking canes of material other than cellulose compounds (celluloid, etc.), or synthetic resin.	do			1929 [4]				
		do	40.0	40.0	1931	Dozen	57,736	38,227	.662
		do	40.0	40.0	1932	do	64,498	26,702	.414
		do	40.0	40.0	1933	do	115,113	44,279	.385
		do	40.0	40.0	1934	do	88,068	28,361	.322
		do	40.0	40.0	1935 [1]	do	49,834	16,607	.333
1558	Incense	20 percent	20.0	20.0	1929	Pound	415,621	114,948	.277
		do	20.0	20.0	1931	do	143,931	33,797	.235
		do	20.0	20.0	1932	do	96,348	14,485	.150
		do	20.0	20.0	1933	do	60,430	10,491	.174
		do	20.0	20.0	1934	do	88,784	13,085	.147
		do	20.0	20.0	1935 [1]	do	57,695	7,999	.139
1558	Manufactured dutiable articles, n. s. p. f.	do	20.0	20.0	1929 [4]				
		do	20.0	20.0	1931			1,522,114	
		do	20.0	20.0	1932			1,111,380	
		do	20.0	20.0	1933			1,133,055	
		do	20.0	20.0	1934			1,401,305	
		do	20.0	20.0	1935 [1]			1,146,140	
1558	Edible vegetable substances, n. s. p. f. (rice foods, thick soy, birds'-nests, and other oriental foods, food tablets, etc.).	do	20.0	20.0	1929			508,071	
		do	20.0	20.0	1931			491,606	
		do	20.0	20.0	1932			389,914	
		do	20.0	20.0	1933 [79]			368,866	
		do	20.0	20.0	1934			621,873	
		do	20.0	20.0	1935 [1]			672,361	
1602	Pyrethrum, or insect flowers, crude.	Free			1929	Pound	9,013,077	2,060,884	.229
		do			1931	do	4,521,143	522,103	.115
		do			1932	do	12,110,736	1,309,092	.108
		do			1933	do	10,434,559	1,523,749	.146
		do			1934	do	10,590,771	2,059,492	.194
		do			1935 [1]	do	6,074,429	1,035,063	.170

[1] 8 months. [2] Less than 1/10 of 1 percent. [4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					
Japan			Proportion from Japan		Comments
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
590	$186	$0.315	0.2	0.4	Imports from Japan consist almost entirely of 1-pint size thermostatic containers of less expensive types, with decorated tin jackets and aluminum cups. Prior to 1933 imports were largely from Germany but imports from that country have declined drastically. Three principal producers, whose output represented about 75 percent of the total, reported production in 1933 amounting to about 2,333,000 pieces; production in 1934 by the entire industry is estimated at between 4 and 4½ million pieces.
12	17	1.42	(¹)	(¹)	
38,766	3,274	.08	15.7	11.4	
296,717	29,238	.10	63.1	55.7	
473,843	57,087	.12	91.9	90.1	
269,948	28,936	.11	89.4	78.5	
1,199,893	82,043	.068	95.6	38.8	Imports from Japan are chiefly children's umbrellas which have a foreign value of about 3 cents each. Umbrellas of this type are not produced in the United States. A relatively small proportion of imports from Japan consists of adult's umbrellas which sell at prices comparable with those for low-grade domestic umbrellas. The bulk of the domestic production consists of high-priced articles. The total domestic production of umbrellas was valued at about 6 million dollars annualy in 1933 and 1934.
546,684	23,094	.042	92.4	29.8	
665,052	13,975	.021	85.3	16.5	
796,392	23,468	.029	89.9	30.4	
1,018,200	53,000	.052	98.9	76.6	
1,894,728	106,922	.056	99.6	87.2	
44,462	3,251	.073	78.5	11.4	About three-fourths of imports from Japan consist of thin bamboo pennant canes with a foreign value of a fraction of 1 cent each. Few, if any, similar pennant canes are made in the United States. Total imports of walking canes (excluding pennant canes) are small relative to domestic production of walking canes. Total imports from Japan have increased since 1931, while imports from other countries have declined.
33,730	3,987	.118	83.8	24.5	
84,946	16,768	.186	93.5	59.8	
121,816	32,101	.264	96.1	78.5	
166,604	26,712	.160	99.3	85.6	
39,341	11,810	.300	68.1	30.9	Imports consist almost exclusively of hand-made bentwood handles selling in the United States for about $1 per dozen. The domestic production of wood handles is very small. The umbrella handles produced in the United States are mainly machine-made cellulose and synthetic resin handles, the bulk of which sell at over $5 per dozen. Imports of these types are negligible. Domestic production of umbrella handles amounted to $813,000 in 1933.
50,042	9,419	.188	77.6	35.3	
93,757	16,249	.173	81.4	36.7	
84,453	21,240	.252	95.9	74.9	
47,794	12,142	.254	95.9	73.1	
392,842	111,156	.283	94.5	96.7	Incense, used for household, ritual, and church purposes, is produced in small quantities by several domestic companies. Imported incense, which comes almost exclusively from Japan, is similar in general to that produced in the United States. New York is the principal port of entry accounting for about 60 percent of total imports in the first 8 months of 1935. Practically all the remaining imports entered at Pacific coast ports and at Hawaii.
139,502	32,550	.233	96.9	96.3	
93,928	14,114	.150	97.5	97.4	
58,199	9,565	.164	96.3	91.2	
86,094	12,078	.140	97.0	92.3	
53,686	7,322	.136	93.1	91.5	
----------	52,589	----------	----------	3.5	Imports from Japan include a wide variety of miscellaneous products such as minature straw hats, grass table mats, grass insoles, fish scale essence, etc. The domestic production of articles comparable with the Japanese products is small.
----------	31,397	----------	----------	3.8	
----------	41,572	----------	----------	3.7	
----------	91,372	----------	----------	6.5	
----------	87,931	----------	----------	7.7	
----------	75,018	----------	----------	14.8	The large increase in imports from Japan in 1934 and 1935 is due to the transfer to this classification from paragraph 5, in June 1934, of certain condiments made of sodium glutamate from wheat (known as ajinomoto vegetable essence powders) which are used for flavoring food; subsequently in November 1935, ajinomoto vegetable essence powder was held to be dutiable under paragraph 5 as before. The domestic production of food flavoring extracts similar to the Japanese product is relatively small. There are also small imports of other vegetable preparations under this classification from Japan.
----------	9,510	----------	----------	1.9	
----------	30,503	----------	----------	7.8	
----------	6,721	----------	----------	1.8	
----------	123,545	----------	----------	19.9	
----------	259,451	----------	----------	38.6	
8,814,931	2,013,020	.228	97.8	97.7	Pyrethrum is obtained from a species of chrysanthemum grown extensively in Japan and to a minor extent in Europe. It is used widely in insect powders and liquid sprays. There is no commercial domestic production, although extensive experimental plantings have recently been made in several States. (See pyrethrum, advanced in value, par. 35.)
3,871,842	452,833	.117	85.6	86.7	
11,061,949	1,201,692	.109	91.3	91.8	
9,066,040	1,373,450	.151	86.9	90.1	
10,093,612	1,985,604	.197	95.3	96.4	
5,803,809	1,003,357	.173	95.5	96.9	

¹⁸ The rate of duty is 15 cents, 30 cents, or 35 cents each, depending on the capacity, and 45 percent.
¹⁹ Exclusive of birds'-nests which were made dutiable at 10 percent ad valorem by Treasury decision, effective Jan. 1, 1933.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1614	Arsenious acid or white arsenic.	Free			1929	Pound	26,314,042	$956,176	$0.036
		do			1931	do	15,581,398	451,468	.029
		do			1932	do	13,764,683	357,991	.026
		do			1933	do	21,166,720	512,542	.024
		do			1934	do	28,219,791	707,709	.025
		do			1935[1]	do	21,035,676	529,073	.025
1615	Containers, or coverings of American manufacture, exported and returned with foreign products, not elsewhere specified.	do			1929			5,242,622	
		do			1931			3,474,305	
		do			1932			2,271,452	
		do			1933			1,840,870	
		do			1934			1,728,852	
		do			1935[1]			1,183,356	
1615	Cotton, the growth, produce, or manufacture of the United States returned.	do			1929	Pound	3,230,700	668,606	.207
		do			1931	do	923,036	95,247	.103
		do			1932	do	144,976	10,892	.075
		do			1933	do	922,107	74,059	.080
		do			1934	do	9,724,867	1,163,508	.120
		do			1935[1]	do	8,172,006	892,385	.109
1615	Articles, the growth, produce, or manufacture of the United States, returned, not elsewhere specified.	do			1929			26,698,711	
		do			1931			23,804,357	
		do			1932			17,383,572	
		do			1933			15,150,532	
		do			1934			17,302,088	
		do			1935[1]			13,291,543	
1617	Waste bagging and waste sugar-sack cloth.	do			1929	Pound	33,587,097	622,158	.019
		do			1931	do	57,075,141	952,772	.017
		do			1932	do	62,978,046	734,730	.012
		do			1933	do	69,157,767	1,096,235	.016
		do			1934	do	56,186,847	1,069,083	.019
		do			1935[1]	do	21,667,478	311,306	.014
1630	Books and pamphlets printed wholly or chiefly in languages other than English.	do			1929			1,966,327	
		do			1931			1,880,948	
		do			1932			1,029,856	
		do			1933			936,668	
		do			1934			1,003,043	
		do			1935[1]			780,788	
1641	Calcium cyanamide or lime nitrogen.	do			1929	Ton	184,260	6,220,996	34.76
		do			1931	do	51,314	1,537,355	29.96
		do			1932	do	62,543	1,628,100	26.03
		do			1933	do	63,842	1,416,437	22.19
		do			1934	do	82,458	1,892,941	22.96
		do			1935[1]	do	71,030	1,687,858	23.76

[1] 8 months.

[2] Less than 1/10 of 1 percent.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
1,415,592	$23,721	$0.017	5.4	2.5	White arsenic is used principally as a raw material for agricultural insecticides. It is produced in the United States as a byproduct in metal smelters, chiefly by 3 companies in Montana and Utah. Domestic production being insufficient for domestic needs, large quantities are imported, chiefly from American-owned smelters in Mexico. Imports supply a substantial part of domestic consumption; for example, in 1933 imports amounted to over 21,000,000 pounds, and domestic sales to 23,594,000 pounds.
3,091,058	66,324	.021	19.8	14.7	
3,286,137	63,659	.019	23.9	17.8	
2,674,714	60,397	.023	12.6	11.8	
2,621,080	61,126	.023	9.3	8.6	
1,669,032	32,465	.019	7.9	6.1	
----------	107,638	----------	------	2.1	This classification includes containers of domestic manufacture such as fiber boxes, fiber shells or partitions, and packs for the protection of fragile articles, exported and then returned to the United States with goods from foreign countries. Japan is a relatively unimportant source of such imports.
----------	53,189	----------	------	1.5	
----------	38,900	----------	------	1.7	
----------	73,140	----------	------	4.0	
----------	73,983	----------	------	4.3	
----------	90,819	----------	------	7.7	
340	70	.206	(1)	(1)	The importations under this classification consist of shipments of raw cotton which have been exported to Japan and returned to the United States. The occasion for the return of these goods arises from a variety of reasons. Frequently the return of the consignment results from changes in marketing situations; in other instances, the cotton may be below contract in grade and staple.
1,288	140	.109	.1	.1	
----------	----------	----------	------	------	
5,219,695	586,701	.112	53.7	50.4	
1,719,122	199,571	.116	21.0	22.4	
----------	206,353	----------	------	.8	Imports include a wide variety of domestic products which have been sent abroad and are subsequently returned to the United States, such as: Aircraft, boats, horses, etc., sent to foreign countries for noncommercial purposes; domestic engines and other equipment for foreign motor boats imported into the United States; domestic articles exported for repairs; and domestic goods similar to goods of foreign manufacture which are not subject to duty when imported into the United States. Japan is a minor factor in this trade.
----------	230,005	----------	------	1.0	
----------	209,639	----------	------	1.2	
----------	189,863	----------	------	1.3	
----------	80,228	----------	------	.5	
----------	72,524	----------	------	.5	
302,704	4,427	.015	.9	.7	This classification includes not only jute fabrics which have become unfit for their original use and which are imported to be shredded into fiber to be respun and rewoven, but also "second-hand" jute bagging and sugar-sack cloth for use as cotton-bale coverings and patches.
5,141,821	68,555	.013	9.3	7.2	
9,102,639	70,889	.008	14.5	9.6	
8,327,107	113,805	.014	12.0	10.4	
13,024,063	210,618	.016	23.2	19.7	
8,022,329	103,874	.013	37.0	33.4	
					Sugar-sack cloth is made from long jute; there is no domestic production; it constituted about a third of the covering requirements of the American cotton crop in 1930; part of this material is obtained from bags in which raw sugar has been imported and the remainder (under par. 1617) as imports of used bags which have been cut open.
					Jute bagging is made from jute butts and rejections; domestic production is partly from new jute butts and partly from jute fiber recovered from waste bagging, waste sugar-sack cloth, etc. Imports of jute waste bagging, including usable second-hand bagging and usable bagging for remanufacture, come from countries which purchase American cotton, of which Japan is now the most important.
----------	115,616	----------	------	5.9	Imports from Japan are books and pamphlets printed in the Japanese language and used largely by Japanese residents in the United States. Only a very few domestic concerns are equipped with type to produce similar printed work. Germany and France are the leading sources of imports of books and pamphlets printed in foreign languages.
----------	89,333	----------	------	4.7	
----------	38,694	----------	------	3.8	
----------	39,777	----------	------	4.2	
----------	49,115	----------	------	4.9	
----------	30,813	----------	------	3.9	
----------	----------	----------	------	------	
336	8,597	25.59	.7	.6	Calcium cyanamide is a nitrogenous compound used as a fertilizer material. There is no domestic production. Imports compete with other nitrogenous fertilizer materials such as ammonium sulphate. Canada supplies the bulk of imports.
15	298	19.87	(1)	(1)	
10,252	172,547	16.83	16.1	12.2	
1,405	45,930	32.69	1.7	2.4	
(80)	12	----------	(1)	(1)	

[80] Less than 1 ton.

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1646	Chestnuts, including marrons, crude, dried, or baked.	Free			1929	Pound	16,933,189	$849,139	$0.050
		do			1931	do	19,510,961	939,461	.048
		do			1932	do	15,421,250	553,337	.036
		do			1933	do	13,236,345	491,884	.037
		do			1934	do	14,070,186	540,033	.038
		do			1935[1]	do	1,304,197	48,781	.037
1648	Chip and chip roping, n. s. p. f.	25 or 33⅓ percent.			1929[4]				
		Free			1931	Pound	853,724	105,072	.123
		do			1932	do	869,207	54,768	.063
		do			1933	do	653,059	35,773	.055
		do			1934	do	773,156	51,479	.067
		do			1935[1]	do	493,506	34,179	.069
1651	Dead or creosote oil	do			1929	Gallon	79,300,575	10,119,379	.128
		do			1931	do	36,884,900	3,597,672	.098
		do			1932	do	29,299,830	2,646,900	.090
		do			1933	do	18,587,894	1,131,453	.061
		do			1934	do	31,773,930	2,835,235	.089
		do			1935[1]	do	30,252,869	3,062,354	.101
1662	Cotton waste	do			1929	Pound	41,207,583	2,478,377	.060
		do			1931	do	14,823,134	596,876	.040
		do			1932	do	6,500,903	176,629	.027
		do			1933	do	20,785,915	813,759	.039
		do			1934	do	61,865,639	2,170,944	.035
		do			1935[1]	do	57,133,788	2,551,635	.045
1668	Glaziers' and engravers' diamonds, unset and miners' diamonds.	do			1929	Carat	44,949	4,067,674	90.50
		do			1931	do	224,970	2,400,879	10.67
		do			1932	do	163,704	1,061,823	6.49
		do			1933	do	263,484	1,263,156	4.79
		do			1934	do	526,007	2,862,349	5.44
		do			1935[1]	do	573,264	2,685,553	4.69
1681	Coney and rabbit furs, undressed.	do			1929	Pound	17,495,090	19,610,808	1.12
		do			1931	do	17,241,443	7,493,357	.43
		do			1932	do	13,216,943	2,966,613	.22
		do			1933	do	20,442,697	6,485,055	.32
		do			1934	do	18,683,952	8,226,141	.44
		do			1935[1]	do	20,537,917	7,894,249	.38
1681	Fox furs, other than silver or black, undressed.	do			1929	Number	1,695,806	16,296,254	9.61
		do			1931	do	1,227,826	7,776,668	6.33
		do			1932	do	1,011,718	4,663,783	4.63
		do			1933	do	882,317	4,360,046	4.94
		do			1934	do	592,917	3,754,012	6.33
		do			1935[1]	do	600,942	3,057,531	5.09
1681	Kolinski furs, undressed.	do			1929	do	638,025	2,227,515	3.49
		do			1931	do	634,627	840,337	1.32
		do			1932	do	771,155	865,669	1.12
		do			1933	do	735,759	780,288	1.06
		do			1934	do	688,579	1,048,769	1.52
		do			1935[1]	do	716,595	854,732	1.19
1681	Mink furs, undressed	do			1929	do	873,380	3,926,119	4.50
		do			1931	do	844,508	1,732,874	2.05
		do			1932	do	1,038,777	1,564,656	1.51
		do			1933	do	1,062,165	2,092,577	1.97
		do			1934	do	1,055,859	2,546,869	2.41
		do			1935[1]	do	1,014,799	1,864,913	1.84

[1] 5 months. [3] Less than 1/10 of 1 percent. [4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
592,452	$48,902	$0.083	3.5	5.8	Imports are principally marrons, a type of chestnut used in salads, candies, etc. Italy supplies about 90 percent of the imports, with Portugal and Japan accounting for most of the remainder. There is practically no commercial production of chestnuts in the United States.
428,327	31,023	.072	2.2	3.3	
517,375	24,244	.047	3.4	4.4	
832,014	42,304	.051	6.3	8.6	
722,071	33,606	.047	5.1	6.2	
19,843	1,330	.067	1.5	2.7	
851,961	104,730	.123	99.8	99.7	Imports consist almost entirely of red and green chip roping used for decorating Christmas trees. Domestic production, if any, is small.
850,920	53,321	.063	97.9	97.4	
653,059	35,773	.055	100.0	100.0	
773,156	51,479	.067	100.0	100.0	
493,506	34,179	.069	100.0	100.0	
414,781	48,944	.118	.5	.5	Creosote oil is produced by the distillation of coal tar. It is used chiefly as a wood preservative. Japan is a relatively unimportant source of imports the bulk being supplied by the United Kingdom and Belgium. Domestic production amounted to 128,000,000 gallons in 1929, 57,000,000 gallons in 1933, and 72,000,000 gallons in 1934. Imports from Japan are entered and used in the western part of the United States where production is relatively small and where the Japanese oil has a transportation advantage.
2,145,494	193,509	.090	5.8	5.4	
2,838,375	234,568	.083	9.7	8.9	
3,637,689	241,166	.066	19.6	21.3	
2,605,575	158,199	.061	8.2	5.6	
2,139,027	196,057	.092	7.1	6.4	
5,070,033	276,633	.055	12.3	11.2	Imports are principally thread waste used for machine wipings and for manufacture into low-grade yarn. Imports from Japan increased sharply in 1935 as compared with previous years. Total imports in recent years are equivalent to approximately 6 percent of the domestic production for sale. Imports are considerably smaller than exports. The United Kingdom, Mexico, and British India are important sources.
3,359,195	141,493	.042	22.7	23.7	
976,230	17,866	.018	15.0	10.1	
3,129,120	69,164	.022	15.1	8.5	
1,448,510	53,420	.037	2.3	2.5	
15,438,588	729,343	.047	27.0	28.6	
497	80,099	161.16	1.1	2.0	Imports consist of rough stones for industrial purposes. Japan is a minor supplier, and the Japanese diamonds have a much higher unit value than imports from other countries. Practically no rough diamonds are mined in the United States.
91	12,556	137.98	(1)	.5	
24	2,064	86.00	(1)	.2	
170	14,692	86.42	(1)	.5	
457	38,234	83.66	(1)	1.4	
486,596	731,033	1.50	2.8	3.7	Japan is a minor supplier of imports, ranking after Australia, France, and the United Kingdom. Coney and rabbit fur skins are used in large quantities for such wearing apparel as women's coats and fur-felt hats.
276,337	358,673	1.30	1.6	4.8	
236,196	126,146	.53	1.8	4.3	
478,447	318,765	.67	2.3	4.9	
456,724	400,660	.98	2.4	4.9	
489,964	350,765	.72	2.4	4.4	
41,489	329,496	7.94	2.4	2.0	Japan ranks after the United Kingdom, Canada, and Soviet Union as a source of imports. Imports supplement the domestic supply.
8,190	67,886	8.29	.7	.9	
20,058	140,940	7.03	2.0	3.0	
18,136	96,179	5.30	2.1	2.2	
14,821	130,040	8.77	2.5	3.5	
9,408	60,736	6.46	1.6	2.0	
75,594	169,744	2.25	11.8	7.6	Kolinski (when dressed known as Siberian mink or Tartar sable) is one of the more expensive skins used for women's wearing apparel, particularly women's fur coats. There is little, if any, production of kolinski skins in this country.
71,749	64,785	.90	11.3	7.7	
130,509	120,432	.92	16.9	13.9	
136,465	128,963	.95	18.5	16.5	
145,574	162,774	1.12	21.1	15.5	
202,221	203,116	1.00	28.2	23.8	
751,954	2,104,191	2.80	86.1	53.6	Imports, principally from Japan, supplement the domestic supply. Japanese mink skins are different in texture and lighter in color than those procured in the United States or imported from Canada, the other principal source.
696,910	662,712	.95	82.5	38.2	
918,122	754,444	.82	88.4	48.2	
849,030	613,770	.72	79.9	29.3	
881,939	955,140	1.08	83.5	37.5	
882,908	866,839	.98	87.0	46.5	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1681	Raccoon furs, undressed.	Free			1929 [4]				
		do			1931	Number	108,931	$480,082	$4.41
		do			1932	do	70,271	230,216	3.28
		do			1933	do	65,991	194,354	2.95
		do			1934	do	93,174	450,040	4.83
		do			1935 [1]	do	46,368	197,206	4.25
1681	Squirrel furs, undressed.	do			1929	do	7,012,674	5,133,431	.732
		do			1931	do	5,573,729	2,208,124	.396
		do			1932	do	6,536,214	1,714,360	.262
		do			1933	do	7,454,349	2,229,469	.299
		do			1934	do	5,751,330	2,247,655	.391
		do			1935 [1]	do	4,017,363	1,312,538	.327
1685	Ammonium sulphate	$5.60 ton	13.8		1929	Ton	19,072	773,356	40.55
		Free			1931	do	114,285	3,196,367	27.97
		do			1932	do	307,311	5,410,160	17.60
		do			1933	do	351,254	6,179,256	17.59
		do			1934	do	185,301	3,656,487	19.73
		do			1935 [1]	do	46,321	1,061,756	22.92
1685	Ammonium phosphates, used as fertilizer.	do			1929 [4]				
		do			1931 [4]				
		do			1932 [4]	Ton			
		do			1933	do	4,140	115,542	27.91
		do			1934	do	9,955	390,023	39.18
		do			1935 [1]	do	7,670	285,160	37.18
1685	Hempseed meal, used in fertilizer.	do			1929 [4]				
		do			1931 [4]				
		do			1932 [4]				
		do			1933 [3]	Ton	807	11,380	14.10
		do			1934	do	7,227	112,683	15.59
		do			1935 [1]	do	4,920	86,354	17.55
1685	Nitrogenous material, n. s. p. f. (including hoof meal, castorbean, pomace).	do			1929	do	69,039	2,655,444	38.46
		do			1931	do	48,923	1,527,315	31.22
		do			1932	do	33,764	820,519	24.30
		do			1933	do	57,497	976,816	16.99
		do			1934	do	94,980	1,994,736	21.00
		do			1935 [1]	do	42,658	798,566	18.72
1685	Superphosphate	do			1929 [4]				
		do			1931 [2]	Ton	5,337	80,794	15.14
		do			1932	do	21,881	315,844	14.43
		do			1933	do	23,705	315,317	13.30
		do			1934	do	16,308	245,540	15.06
		do			1935 [1]	do	14,589	234,066	16.04

[1] 8 months.
[2] From May 1 to Dec. 31, inclusive.
[3] From July 1 to Dec. 31, inclusive.
[4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
10,007	$84,120	$8.41	9.2	17.5	Japan supplies only a small part of total imports, the bulk coming from China. Imports supplement domestic production which, although substantial, is not adequate to meet the demand in the United States.
3,234	14,382	4.45	4.6	6.2	
3,703	18,549	5.01	5.6	9.5	
4,915	38,661	7.87	5.3	8.6	
502	2,775	5.53	1.1	1.4	
279,765	249,941	.893	4.0	4.9	Japan is a minor source of imports, ranking after the United Kingdom, Canada, and Germany. Squirrel skins are used for women's coats. Domestic production of this type of skin is inadequate to meet the demand in the United States.
74,802	44,780	.599	1.3	2.0	
177,946	68,711	.386	2.7	4.0	
123,773	81,843	.661	1.7	3.7	
161,380	121,229	.751	2.8	5.4	
203,539	105,864	.520	5.1	8.1	
9,994	351,667	35.19	8.7	11.0	Imports from Japan are entered and used exclusively in the west-coast area. Total domestic production amounted in 1933 to 378,000 tons valued at $6,875,000, but a relatively small percentage of this amount is produced by the 2 producers in the west-coast area. The Netherlands and Canada are the principal sources of imports. (Imports from Kwantung were 500 tons in 1932 and 932 tons in 1934.)
16,270	249,098	15.31	5.3	4.6	
44,998	842,254	18.72	12.8	13.6	
32,193	625,246	19.42	17.4	17.1	
494	13,521	27.37	1.1	1.3	
					Production in the western part of the United States is limited to small quantities produced in Montana. Imports from Japan, which supply less than 10 percent of domestic consumption, are entered and used entirely in the west coast area, and compete in part in that area with imported and domestic ammonium sulphate and superphosphate. The bulky nature of the product and the costly freight haul from the East makes the marketing of eastern domestic phosphate in the West difficult. Canada is the principal source of imports.
3,432	76,337	22.24	82.9	66.1	
1,803	49,482	27.44	18.1	12.7	
628	17,329	27.59	8.2	6.1	
					This commodity is used chiefly as a fertilizer. Imports enter and are used in the western part of the United States where there is a deficiency of organic fertilizer materials. There is a very small production of hempseed on the west coast; also, some domestic production of the oil-cake meal from imported hempseed.
650	8,690	13.37	80.5	76.4	
6,387	98,153	15.37	88.4	87.1	
4,832	84,833	17.56	98.2	98.2	
923	22,950	24.86	1.9	1.5	Incomplete data from west coast customs districts indicate that imports from Japan consist of misclassified superphosphates, fish meal, and seed-oil cake meal for fertilizer use. (For data re superphosphate, see "note" below.)
3,418	62,891	18.40	10.1	7.7	
3,090	67,093	21.71	5.4	6.9	
15,573	433,462	27.83	16.4	21.7	
8,336	209,287	25.11	19.5	26.2	
1,968	29,082	14.78	36.9	36.0	Superphosphate is used exclusively as fertilizer. Imports from Japan enter and are used entirely in the west coast area. Domestic production amounted to 2,634,870 tons in 1933 and 2,868,016 tons in 1934, but only about 5 percent of this production occurred in the western part of the United States. Although the price of the 95 percent of production produced in the eastern part of the United States is lower than that produced in the West or imported from Japan, the costly long freight haul prevents eastern superphosphate from being sold in the West. The amount and value of phosphate rock imported by Japan from the United States are far larger than the superphosphates (made from the rock) imported from Japan. Canada is an important source of superphosphate. NOTE.—Additional imports from Japan were erroneously recorded as "Nitrogenous material, n. s. n. f."
13,880	172,464	12.43	63.4	54.6	
12,132	157,956	13.02	51.2	50.1	
9,362	131,637	14.06	57.4	53.6	
4,463	67,665	15.16	30.6	28.9	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1685	Substances used chiefly for fertilizers, not elsewhere specified.	Free			1929	Ton	89,000	$1,714,448	$19.26
		do			1931	do	42,092	510,895	12.14
		do			1932	do	42,942	630,373	14.68
		do			[illegible]	do	62,556	1,144,573	18.30
		do			[illegible]34	do	44,769	878,991	19.63
		do			1935[1]	do	30,952	595,021	19.22
1688	Cattle body hair (10 cents or less per pound).	do			1929	Pound	8,500,298	678,903	.079
		do			1931	do	4,362,579	226,278	.052
		do			1932	do	1,407,254	52,400	.037
		do			1933	do	3,265,927	133,403	.041
		do			1934	do	3,224,516	166,758	.052
		do			1935[1]	do	1,850,080	97,569	.053
1688	Animal hair, n. s. p. f. including cattle switches, long-tail hair, and cattle body hair over 10 cents per pound.	do			1929	do	8,279,757	1,448,566	.175
		do			1931	do	3,160,131	429,868	.136
		do			1932	do	1,490,202	206,179	.138
		do			1933	do	3,947,017	455,316	.115
		do			1934	do	2,618,815	327,095	.125
		do			1935[1]	do	2,333,445	359,574	.154
1722	Moss, seaweeds, and vegetable substances, crude or unmanufactured n. s. p. f.	do			1929			404,137	
		do			1931			226,412	
		do			1932			95,676	
		do			1933			93,434	
		do			1934			119,404	
		do			1935[1]			90,773	
1724	Needles, hand sewing or darning.	do			1929	Thousand.	781,576	815,190	1.04
		do			1931	do	798,220	625,298	.783
		do			1932	do	836,527	420,133	.502
		do			1933	do	816,273	476,981	.584
		do			1934	do	857,867	595,231	.694
		do			1935[1]	do	574,884	389,384	.677
1726	Newspapers and periodicals, unbound.	do			1929	Pound	2,209,493	460,680	.209
		do			1931	do	2,373,804	503,174	.212
		do			1932	do	2,185,343	365,428	.167
		do			1933	do	2,140,845	347,110	.162
		do			1934	do	2,421,133	454,895	.188
		do			1935[1]	do	1,572,787	315,717	.201
1727	Rapeseed	do			1929	do	9,722,606	475,749	.049
		do			1931	do	8,027,037	264,772	.033
		do			1932	do	10,747,605	269,506	.025
		do			1933	do	13,626,932	348,264	.026
		do			1934	do	9,323,796	270,709	.029
		do			1935[1]	do	24,306,839	497,198	.020

[1] 8 months.

[2] Less than 1/10 of 1 percent.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
100	$5,386	$53.86	0.1	0.3	Incomplete data from the Los Angeles customs district indicate imports from Japan to be "compound fertilizers", "fertilizer substance", and "sardine meal." These imports from Japan are consumed entirely in the western part of the United States. In general, production of such materials in the western area is small. Consumption of all fertilizers west of the Rocky Mountains is very small relative to other areas. Canada is the principal source of imports.
3,132	52,586	16.79	7.4	10.3	
8,477	167,230	19.73	19.7	26.5	
8,991	199,928	22.24	14.4	17.5	
7,416	201,240	27.14	16.6	22.9	
5,748	106,477	18.52	18.6	17.9	
773,072	49,517	.064	9.1	7.3	Cattle body hair, valued at 10 cents or less per pound, is a byproduct of the tanning industry and is used in the manufacture of felts, coarse fabrics, cement, and plaster. Canada is the principal source of imports. Domestic production is large and exports of cattle body hair exceed imports, being 8,038,886 pounds in 1934, valued at $544,425.
111,200	8,621	.078	2.5	3.8	
60,800	2,283	.038	4.3	4.4	
258,400	8,874	.034	7.9	6.7	
515,728	19,892	.039	16.0	11.9	
220,000	10,642	.048	11.9	10.9	
13,134	1,506	.115	.2	.1	Imports consist principally of badger, squirrel, goat, and skunk hair. Domestic production consists largely of hog, skunk, ox, and civet hair. Both domestic and imported hair is used principally in the manufacture of brushes and for this purpose the various types are interchangeable. Japan is an unimportant factor in imports.
14,128	14,783	1.046	.9	7.2	
173,542	6,511	.038	4.4	1.4	
82,738	16,169	.195	3.2	4.9	
772	934	1.210	(1)	.3	
----------	143,510	----------	------	35.5	Imports from Japan consist chiefly of loofah (used as sponges and also in the manufacture of caps and women's hats), dried seaweed, leaves, and roots. The domestic production of seaweed was estimated at about 500 tons in 1932. The domestic production of other materials in this group is small.
----------	114,677	----------	------	50.6	
----------	55,273	----------	------	57.8	
----------	57,720	----------	------	61.8	
----------	74,104	----------	------	62.1	
----------	44,233	----------	------	48.7	
621	711	1.145	(1)	(1)	Practically all of the metal hand-sewing or darning needles used in the United States are imported, as the industry has never been developed in this country. The United Kingdom supplies about 40 percent of the imports, by quantity. English needles are high-grade needles with a foreign value about triple that of the bulk of imports from other countries. Japan, a negligible supplier before 1933, now supplies about ⅛ of the total imports (quantity). The Japanese needles have a low foreign value, about the same as that of the German and Czechoslovakian needles with which they more closely compete. The increased imports from Japan have accompanied declining imports from Germany.
276	241	.873	(1)	(1)	
2,094	641	.306	.3	.2	
14,129	5,742	.406	1.7	1.2	
120,407	41,697	.346	14.0	7.0	
103,153	34,210	.332	17.9	8.8	
358,867	87,842	.245	16.2	19.1	Newspapers and periodicals entering under this provision must be paper-covered, current publications, published regularly, and imported within 6 months of issue; they may be in English or foreign languages. Imports from Japan consist chiefly of newspapers and periodicals purchased by Japanese residing in the United States. The United Kingdom was the principal source of imports, by value, in 1934, although imports are from various countries.
555,586	117,116	.211	23.4	23.3	
660,092	85,591	.130	30.2	23.4	
649,782	61,377	.094	30.4	17.7	
738,753	85,288	.115	30.5	18.7	
462,110	53,326	.115	29.4	16.9	
3,778,533	171,289	.045	38.9	36.0	Prior to 1935 imports of rapeseed were used principally as birdseed and for planting. The shortage and increased prices of edible oils in the United States in 1935, however, stimulated a greatly increased importation of rapeseed during the first 8 months of the year, the increased imports coming chiefly from Argentina. This excess importation is probably being crushed and the resulting oil used in the manufacture of lard compounds. There is no commercial production of rapeseed for oil production in the United States, although considerable acreages are grown for pasture and forage. Belgium and Germany are important sources.
1,380,820	40,756	.030	17.2	15.4	
3,539,143	72,889	.021	32.9	27.0	
4,682,170	108,343	.023	34.4	31.1	
5,997,054	153,513	.026	64.3	56.7	
3,329,820	84,081	.025	13.7	16.9	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1730	Cod oil	Free			1929	Gallon	2,090,818	$1,019,582	$0.488
		do			1931	do	1,794,359	610,126	.340
		do			1932	do	3,286,366	919,822	.280
		do			1933	do	2,115,144	449,695	.213
		do			1934	do	1,458,635	390,860	.268
		do			1935[1]	do	1,836,490	533,103	.290
1731	Camphor oil	do			1929	Pound	2,822,420	270,268	.096
		do			1931	do	1,731,135	196,974	.114
		do			1932	do	1,717,916	111,428	.065
		do			1933	do	1,359,618	85,092	.063
		do			1934	do	1,156,872	127,116	.110
		do			1935[1]	do	761,123	122,595	.148
1732	Rapeseed (colza) oil, inedible	6 cents gallon			1929[4]				
		Free			1931	Gallon	1,854,313	502,126	.271
		do			1932	do	829,962	226,961	.273
		do			1933	do	1,468,932	412,425	.281
		do			1934	do	1,975,841	617,075	.312
		do			1935[1]	do	2,367,364	800,786	.338
1732	Perilla oil	do			1929	Pound	5,574,319	637,962	.114
		do			1931	do	13,285,492	729,294	.055
		do			1932	do	16,525,139	553,599	.034
		do			1933	do	22,775,958	1,086,046	.048
		do			1934	do	25,164,203	1,612,696	.064
		do			1935[1]	do	55,642,125	3,394,185	.061
1744	Platinum ingots, bars, sheets, or plates, not less than ⅛-inch thick	do			1929	Ounces, Troy	40,594	2,640,097	65.04
		do			1931	do	23,553	657,413	27.91
		do			1932	do	7,618	237,086	31.12
		do			1933	do	39,767	1,125,763	28.31
		do			1934	do	13,829	462,069	33.41
		do			1935[1]	do	21,365	652,960	30.56
1750	Rags for paper stock	do			1929	Pound	446,606,353	9,346,303	.021
		do			1931	do	117,799,827	1,620,612	.014
		do			1932	do	87,732,544	1,138,746	.013
		do			1933	do	171,543,540	1,114,606	.008
		do			1934	do	101,523,797	1,282,668	.013
		do			1935[1]	do	114,245,583	1,347,086	.012
1756	Tuna fish, fresh or frozen, whether or not whole	do			1929[4]				
		do			1931	Pound	7,857,846	578,615	.074
		do			1932	do	5,037,875	297,790	.059
		do			1933	do	5,935,957	232,987	.039
		do			1934	do	6,093,459	413,476	.068
		do			1935[1]	do	2,217,916	141,673	.064
1761	Shrimps and prawns	do			1929[4]				
		do			1931	Pound	1,077,704	151,509	.141
		do			1932	do	457,291	57,828	.126
		do			1933	do	716,235	84,989	.119
		do			1934	do	893,599	111,254	.125
		do			1935[1]	do	763,610	82,695	.108

[1] 8 months.

[4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
44,862	$19,529	$0.435	2.1	1.9	Cod oil is the lower grade oil extracted from the livers of codfish; the higher grade is known as cod-liver oil and is not included in this classification. Cod oil is used chiefly in the leather industry. The greater part of domestic consumption is supplied by imports, chiefly from Norway; the United Kingdom, Newfoundland, and Labrador, and Japan being minor sources.
24,432	8,818	.361	1.4	1.4	
92,535	15,349	.166	2.8	1.7	
34,104	8,738	.256	1.6	1.9	
101,373	27,402	.270	6.9	7.0	
230,555	52,024	.226	12.6	9.8	
2,171,015	220,272	.101	76.9	81.5	Camphor oils are used principally as the sources of safrol and artificial sassafras. The production of the several camphor oils is a Japanese Government monopoly. In recent years Japan has restricted the exportation of camphor oil and developed production of its various derivatives. Camphor oil is not produced in the United States.
1,628,197	183,530	.113	94.1	93.2	
1,693,526	109,034	.064	98.6	97.9	
1,349,345	84,427	.063	99.2	99.2	
1,113,317	123,493	.111	96.2	97.1	
744,112	121,386	.163	97.8	99.0	
					Inedible rapeseed oil is used chiefly for lubrication, especially for marine engines, and to a lesser extent as a plasticizer in varnishes and lacquers. There is little, if any, inedible rapeseed oil produced domestically. Its properties are such that is is considered practically non-competitive with domestic oils and fats.
1,253,559	493,128	.397	67.6	98.2	
705,069	183,929	.261	85.0	81.0	
1,263,419	354,020	.280	86.0	85.8	
1,973,761	615,966	.312	99.9	99.8	
2,286,848	776,349	.339	96.6	96.9	
2,193,385	253,248	.115	39.3	39.7	Perilla oil is a high-grade "drying" oil having special use but competing to some degree with linseed and other drying oils. It is used in enamel paints, varnishes, linoleums, etc. Imports come almost entirely from Japan and Kwantung. The large increases in imports in recent years, particularly 1935, is due largely to increased prices for competing oils, and to a more general appreciation of its qualities.
6,109,512	333,099	.055	46.0	45.7	
8,613,211	272,725	.032	52.1	49.3	
16,109,268	851,297	.053	70.7	78.4	
16,667,227	1,118,049	.067	66.2	69.3	
33,126,704	2,080,275	.063	59.5	61.3	
4,100	249,185	60.78	10.1	9.4	Neither Japan nor the United States are important producers of platinum, although both are substantial traders in that metal. The United States exports more platinum to Japan than is imported from that country. The United Kingdom and the Union of Soviet Socialist Republics are the principal sources of imports.
1,998	56,241	28.15	26.2	23.7	
9,430	274,524	29.11	23.7	24.4	
8,958	296,503	33.10	64.8	64.2	
500	14,843	29.69	2.3	2.3	
71,515,353	1,425,679	.020	16.0	15.3	Rags used for paper stock include worn and discarded clothing and other materials, and also new rags, i. e., cuttings and trimmings from textile and wearing apparel industries. Imports from Japan consist chiefly of cotton rags, both old and new. Large quantities are imported from various countries. Soviet Union, Japan, France, United Kingdom, and Belgium, in the order named, were the principal sources of imports by value in 1934. Domestic supply of rags for paper stock is large, but no statistics are available.
32,697,096	506,953	.016	27.8	31.3	
26,909,858	389,368	.014	30.7	34.2	
38,957,853	153,445	.004	22.7	10.8	
36,150,886	199,341	.006	35.6	15.5	
33,511,090	275,485	.008	29.3	20.5	
6,811,586	529,937	.078	86.7	91.6	The bulk of imports in this classification consists of frozen albacore (one of the several species of tuna), imported from Japan and used for canning on the west coast of the United States. Imports of fresh tuna from Mexico and Canada are insignificant. Albacore, possessing a whiter meat when cooked than other species of tuna and therefore selling at higher prices, when canned, to a certain fancy market, was formerly plentiful off the coast of California, but since 1925 has practically disappeared from the coasts of North and South America. Domestic catch of other species of tuna (yellowfin, skipjack, and bluefin), the bulk of which is canned, amounted to 68,000,000 pounds in 1933 and 94,000,000 pounds in 1934.
4,295,154	270,757	.063	85.3	90.9	
4,496,969	178,633	.040	75.8	76.7	
5,733,203	396,329	.069	94.1	95.9	
1,981,496	127,797	.064	89.3	90.2	
170,601	26,107	.153	15.8	17.2	Mexico supplies about three-fourths of the imports by quantity, with Japan supplying most of the remainder. Imports from Japan are dried shrimp and canned shrimp; from Mexico fresh and dried shrimps. Total imports are considerably smaller than total exports.
168,226	12,952	.077	36.8	22.4	
277,828	24,858	.089	38.8	29.2	
149,707	19,833	.132	16.8	17.8	
104,989	13,447	.128	13.7	16.3	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
1761	Scallops	Free			1929[4]				
		do			1931	Pound	153,427	$24,382	$0.159
		do			1932	do	367,430	42,040	.114
		do			1933	do	834,556	114,695	.137
		do			1934	do	867,576	131,360	.151
		do			1935[1]	do	748,939	105,793	.141
1761	Oysters, not in airtight containers.	do			1929[4]				
		do			1931	Pound	2,269,509	133,203	.059
		do			1932	do	3,521,287	195,897	.056
		do			1933	do	4,905,457	118,337	.024
		do			1934	do	7,435,025	223,884	.030
		do			1935[1]	do	7,029,679	176,421	.025
1761	Shellfish, n. s. p. f.	do			1929[4]				
		do			1931	Pound	4,140,719	569,360	.138
		do			1932	do	3,198,489	294,343	.092
		do			1933	do	3,622,816	326,087	.090
		do			1934	do	3,919,713	386,817	.099
		do			1935[1]	do	2,859,731	318,335	.111
1762	Silk waste	do			1929	do	10,659,102	4,955,325	.465
		do			1931	do	5,544,314	975,169	.176
		do			1932	do	3,439,893	408,362	.119
		do			1933	do	5,596,107	1,006,673	.180
		do			1934	do	3,918,900	713,379	.182
		do			1935[1]	do	2,541,380	451,844	.178
1763	Raw silk, in skeins reeled from the cocoons, or rereeled but not wound, doubled, twisted, or advanced.	do			1929	do	87,814,774	426,595,941	4.86
		do			1931	do	83,459,066	190,889,130	2.29
		do			1932	do	74,044,705	113,874,551	1.54
		do			1933	do	67,245,130	102,536,274	1.52
		do			1934	do	56,379,322	71,764,009	1.27
		do			1935[1]	do	42,461,889	55,422,620	1.31

[1] 8 months.

[4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
31,841	$5,982	$0.188	20.8	24.5	Imports from Japan are frozen scallops sold principally in the Pacific coast area and Hawaii. About 1 percent of the domestic catch of scallops comes from the Pacific coast area (Washington) while the great bulk of the domestic catch is from the Atlantic coast. Imports from Canada, the principal foreign supplier, are fresh and frozen scallops sold in the Atlantic area. Imports supply about 15 percent of the total domestic consumption.
153,548	15,200	.099	41.8	36.2	
238,448	26,897	.113	28.6	23.5	
258,841	25,994	.100	29.8	19.8	
329,961	28,969	.088	44.1	27.4	
1,721,979	59,458	.035	75.9	44.6	Imports from Japan consist almost entirely of seed oysters planted chiefly in the State of Washington. The Japanese seed attains marketable size in from 12 to 28 months after planting, whereas the domestic Atlantic coast seed, with which imports compete to a certain extent, requires upwards of 5 years to mature. Both Japanese and Atlantic coast oysters will grow on the Pacific coast but will not propagate, reseeding after each harvest being necessary.
3,247,065	151,836	.047	92.2	77.5	
4,738,025	85,095	.018	96.6	71.9	
7,242,955	181,484	.025	97.4	81.1	
6,825,766	133,044	.019	97.1	75.4	
719,386	141,963	.197	17.4	24.9	Shellfish n. s. p. f. includes a wide variety of shellfish (other than lobsters, clams, oysters, shrimps, scallops, and crabs) of which the principal item of imports is abalone from Mexico. Imports from Japan consist almost entirely of specialty shellfish for Oriental consumption in the United States. There is no domestic production comparable with the Japanese products.
986,167	69,028	.070	30.8	23.5	
1,052,318	80,856	.077	29.0	24.8	
859,321	81,444	.095	21.9	21.1	
677,587	64,824	.096	23.7	20.4	
3,535,329	1,290,123	.365	33.2	26.0	The term "silk waste" includes (*a*) unreelable cocoons, (*b*) fiber discarded in silk filatures during the process of reeling, and (*c*) mill wastes. This classification covers all these types except cocoons, the small imports of which are recorded separately. Filature wastes, unreelable cocoons, and soft mill wastes are used almost wholly in the spun silk industry. Hard-twisted mill thread waste which requires garnetting and exhausted noils under 2 inches in length, a by-product of spun silk manufacture, are used in the woolen yarn industry. The only type of silk waste produced in the United States is mill waste; this production accounts for about 10 percent of the silk waste used in the domestic spun silk industry. China in most years is the principal source of imports of silk waste followed by Japan.
2,380,901	254,206	.107	42.9	26.1	
2,012,079	71,764	.036	58.5	17.6	
1,525,728	77,806	.051	27.3	7.7	
1,531,914	172,830	.113	39.1	24.2	
1,263,294	155,209	.123	49.7	34.4	
70,695,520	355,927,234	5.03	80.5	83.4	Prior to 1934 raw silk was the most important item in Japan's total export trade, representing 36 percent of the value of her total exports in 1929 and 21 percent in 1933. In 1934, exports of raw silk amounted to 13 percent of the total trade and were exceeded by exports of cotton piece goods. About 97 percent of Japan's exports of raw silk in 1929 and 85 percent in 1934 were taken by the United States. Raw silk is the most important single commodity exported from Japan to the United States. There is no production of raw silk in the United States. The quantity of Japan's exports of raw silk declined only moderately from 76,041,000 pounds in 1929 to 66,934,000 pounds in 1934, but the value declined from 781,040,000 yen in the former year to 286,794,000 yen in the latter, prices having fallen drastically due in part to overproduction and to competition with rayon. Inasmuch as Japan's scarcity of raw materials necessitates large imports, the decline in the value of her raw silk exports has created considerable pressure in the country for the development of other industries and has been an important factor in her recent economic expansion.
69,526,075	163,069,875	2.35	83.4	85.4	
69,135,931	106,187,209	1.54	93.4	93.2	
60,213,037	91,659,271	1.52	89.5	89.4	
54,989,228	69,846,669	1.27	97.5	97.3	
41,369,087	53,773,661	1.30	97.4	97.0	

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TABLE 1.—*United States imports for consumption of commodities of which*

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
1780	Fish scrap and fish meal.	Free			1929[4]				
		do			1931	Ton	38,447	$1,351,842	$35.16
		do			1932	do	21,805	530,502	24.33
		do			1933	do	26,526	689,192	25.98
		do			1934	do	35,624	996,358	27.97
		do			1935[1]	do	21,155	568,485	26.87
1783	Tea, n. s. p. f.	do			1929	Pound	89,372,626	25,865,803	.289
		do			1931	do	86,733,068	18,757,081	.216
		do			1932	do	94,726,648	12,455,417	.131
		do			1933	do	96,581,838	13,707,412	.142
		do			1934	do	76,409,578	16,263,891	.213
		do			1935[1]	do	52,207,293	11,031,808	.211
1796	Vegetable wax, n. s. p. f.	do			1929	do	4,610,650	722,614	.157
		do			1931	do	2,647,872	230,010	.087
		do			1932	do	3,197,160	217,017	.068
		do			1933	do	3,835,925	199,330	.052
		do			1934	do	2,692,830	191,233	.071
		do			1935[1]	do	2,966,140	216,922	.073
1798	Household furniture, wearing apparel, tools of trade, books, and professional and personal effects, not merchandise.	do			1929			7,399,514	
		do			1931			5,535,935	
		do			1932			3,394,554	
		do			1933			3,319,792	
		do			1934			4,127,495	
		do			1935[1]			2,551,284	
1806	Bamboo stems for rug poles and fishing rods.	do			1929[4]				
		do			1931			17,888	
		do			1932			31,292	
		do			1933			46,510	
		do			1934			85,481	
		do			1935[1]			109,400	
1806	Sticks, rough, cut into lengths for umbrellas, parasols, sunshades, whips, fishing rods, or walking canes of partridge, hair wood, pimiento, orange, myrtle, bamboo, India malacca joints, and other wood, n. s. p. f.	do			1929			344,121	
		do			1931			170,107	
		do			1932			101,967	
		do			1933			72,195	
		do			1934			113,028	
		do			1935[1]			24,220	
1811	Works of art (except rugs and carpets) artistic antiquities, and objects of ornamental or educational value, other than furniture, produced prior to the year 1830.	do			1929[4]				
		do			1931[4]				
		do			1932			11,650,809	
		do			1933			8,740,612	
		do			1934			8,080,687	
		do			1935[1]			4,015,530	

[1] 8 months. [4] Not separately classified.

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imports from Japan were valued at more than $12,000 in 1934—Continued

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
26,919	$940,205	$34.93	70.5	69.5	Fish scrap and meal, which are manufactured from fresh whole fish and from the offal of the fish-preparing and fish-preserving industries, are used for fertilizer and (to an increasing degree) as poultry and stock feed. In 1934, California, which previously had restricted the reduction of pilchards into fish scrap and meal, relaxed its regulations and United States production in that year rose to the largest amount on record, 197,000 tons, valued at $6,069,000, and United States exports, chiefly to Europe, which had been only 2,000 to 3,000 tons annually, increased to 30,000 tons of which 80 percent was from the Pacific coast. Imports, which had previously been almost entirely to the Pacific coast, were diverted to the Atlantic coast, the production of menhaden meal there having declined, due chiefly to low prices and poor run of fish.
13,067	288,208	22.06	59.9	54.3	
23,720	610,535	25.74	89.4	88.6	
33,753	931,226	27.59	94.7	93.5	
20,680	552,562	26.72	97.8	97.2	
24,538,932	5,151,753	.210	27.5	19.9	Japan supplies 80 percent of total imports of green tea and 10 percent of the much larger imports of black teas. The use of green tea is declining in the United States. There is no domestic production.
21,416,682	3,143,271	.147	24.7	16.8	
24,594,317	1,966,560	.080	26.0	15.8	
24,881,036	1,897,731	.076	25.8	13.8	
22,569,269	2,286,318	.101	29.5	14.1	
9,917,551	1,084,899	.109	19.0	9.8	
3,060,888	458,110	.150	66.4	63.4	Imports of vegetable waxes, n. s. p. f., consist mainly of Japan wax from Japan and candelilla wax from Mexico. They are used in polishes, insulating materials, varnishes, etc. There is no domestic production of these natural waxes.
2,137,422	171,168	.080	80.7	74.4	
2,462,667	146,079	.059	77.0	67.3	
2,753,983	129,881	.047	71.8	65.2	
1,904,172	105,794	.056	70.7	55.3	
1,946,060	116,298	.060	65.6	53.6	
----------	49,287	----------	------	.7	Imports include a large number of articles, such as books, furniture, wearing apparel, professional instruments, tools of trade, household and personal effects belonging to and used abroad by foreign nationals and American citizens. Subject to certain conditions, these articles are admitted to the United States free of duty. Imports in this category from Japan are relatively small.
----------	64,768	----------	------	1.2	
----------	45,503	----------	------	1.3	
----------	23,813	----------	------	.7	
----------	34,885	----------	------	.8	
----------	22,838	----------	------	.9	
----------	----------	----------	------	------	
----------	16,304	----------	------	91.1	Japan is the principal source of imports but in recent years British India has steadily improved its position as a supplier. Bamboo is not produced on a commercial scale in the United States. There is some production of rug poles from domestic woods.
----------	30,813	----------	------	98.5	
----------	45,898	----------	------	98.7	
----------	72,411	----------	------	84.7	
----------	69,515	----------	------	63.5	
----------	270,364	----------	------	78.6	Imports consist chiefly of fancy woods and bamboo, used in the manufacture of baskets, fishing rods, furniture, canes, and umbrella sticks. There is little or no domestic production of bamboo or fancy woods of the varieties imported.
----------	116,345	----------	------	68.4	
----------	66,520	----------	------	65.2	
----------	43,754	----------	------	60.6	
----------	80,455	----------	------	71.2	
----------	19,306	----------	------	79.7	
----------	----------	----------	------	------	Imports consist of antique jewelry, statuary, carvings, prints, pictures, etc., which are sold primarily on the basis of artistic merit rather than of price. Japan is a minor source of imports.
----------	----------	----------	------	------	
----------	159,440	----------	------	1.4	
----------	231,973	----------	------	2.7	
----------	103,695	----------	------	1.3	
----------	61,642	----------	------	1.5	

Sources: Statistics of imports for the year 1934 were taken from Foreign Commerce and Navigation of the United States. Statistics of imports for other years were compiled from monthly reports (in code) supplied by the Bureau of Foreign and Domestic Commerce.

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TABLE 2.—*United States imports for consumption, of which imports from Japan were*

Par. (1930 act)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
							Total, all countries		
			All countries	Japan			Quantity	Value	Unit value
			Pct.	*Pct.*					
53	Expressed and extracted oils, n. s. p. f., inedible.	20 percent			1929		(1)	(1)	(1)
		do	20.0	20.0	1931	Pound	10,406	$1,851	$0.178
		do	20.0	20.0	1932	do	37,503	3,913	.104
		do	20.0	20.0	1933	do	39,057	4,979	.127
		do	20.0	20.0	1934	do	2,005,386	68,667	.034
		do	20.0	20.0	1935 [2]	do	4,444,852	224,280	.050
54	Cottonseed oil, edible, crude, and refined.	3 cents per pound.			1929		(1)	(1)	(1)
		do	28.4		1931	Pound	1,012	108	.107
		do			1932	do			
		do			1933	do			
		do	71.8	75.9	1934	do	9,157,392	382,871	.042
		do	58.1	58.2	1935 [2]	do	132,071,113	6,818,077	.052
730	Cottonseed oil cake and oil-cake meal.	Free			1929	do	43,770,008	578,668	.013
		3/10 cent per pound.	57.5		1931	do	1,462,800	7,637	.005
		do	51.3		1932	do	1,058,945	6,198	.006
		do	55.2		1933	do	7,004,025	38,083	.005
		do	26.8	32.6	1934	do	44,891,090	503,368	.011
		do	26.6	29.1	1935 [2]	do	57,848,182	651,451	.011
730	Beet pulp, dried	$5 per ton	14.4		1929	Ton	31,731	1,099,668	34.66
		do	32.3		1931	do	41,224	638,215	15.48
		do	36.2		1932	do	10,128	139,803	13.80
		do	36.1		1933	do	7,106	98,489	13.86
		do	25.1	31.7	1934	do	3,067	61,178	19.95
		do	19.8	20.0	1935 [2]	do	21,445	540,898	25.22
805	Malt liquors [3]	$1 per gallon			1929		(4)	(4)	(4)
		do			1931		(4)	(4)	(4)
		do			1932		(4)	(4)	(4)
		do	129.5	329.6	1933	Gallon	1,437,453	1,110,066	.772
		do	69.4	255.7	1934	do	459,978	662,440	1.440
		do	66.3	276.0	1935 [2]	do	39,294	59,303	1.509
		50 cents per gallon. [5]	49.5	126.0		do	535,111	540,235	1.010

[1] Not separately classified.
[2] 8 months.
[3] New class effective Jan. 1, 1933 (included with fluid malt extract, etc., in previous years).

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valued at less than $12,000 in 1934 but more than $25,000 in the first 8 months of 1935

Imports for consumption—Continued					Comments
Japan			Proportion from Japan		
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
(1)	(1)	(1)			Imports from Japan in 1935 under this classification consist almost entirely of kapok oil, and a negligible quantity of mustard seed oil, both of which are somewhat competitive with domestic oils. Kapok oil is extracted from the seed of the kapok tree cultivated principally in Java. The oil is used chiefly in soap making, and after refinement, for edible purposes. The Dutch East Indies is the principal source of imports of both the seed and the oil. The relatively unimportant mustard seed oil, imported from Japan, may be further refined for edible purposes, or may be used for other purposes. The large increase in imports of oils and fats in recent years is attributed to decreased domestic production of lard and cottonseed oil, to the excise taxes placed in 1934 on certain oils, and increased domestic prices. The Netherlands was the principal source of imports under this classification in 1934.
26	$35	$1.350	0.2	1.9	
6,500	573	.088	17.3	14.6	
25,635	2,641	.103	65.6	53.0	
140,550	5,515	.039	7.0	8.0	
802,967	43,737	.054	18.1	19.5	
(1)	(1)	(1)			Cottonseed oil is obtained by the expression of cottonseed. The greater part of that produced in the United States is refined and consumed in edible products, principally lard compounds and vegetable shortenings, which compete with lard. Imports prior to 1934 were insignificant compared to domestic production, and the United States has normally produced a surplus. In recent years, however, the decline in the domestic production of lard and of cottonseed oil, together with the excise tax placed in 1934 on certain imported oils which compete in some uses with cottonseed oil, have resulted in an increase in the price of cottonseed oil. These factors are responsible for the large increase in imports in 1934 and 1935. Other important sources of imports, but of lesser importance than Japan, are the Netherlands, Brazil, and the United Kingdom.
120,400	4,758	.040	1.3	1.2	
21,715,487	1,118,573	.052	16.4	16.4	
1,203,475	11,074	.009	2.7	2.2	Cottonseed oil-cake is a byproduct secured in the manufacture of cottonseed oil from cottonseed; cottonseed meal is the cake after it has been ground. In the form of meal the product is used as cattle feed, and to some extent as fertilizer. Imports, small as compared to domestic production, normally are from Mexico, but in 1934 and 1935 imports from Japan became of consequence. As Japan does not produce cotton, the cake and meal exported from that country are produced from imported seed. Imports of cottonseed cake and meal from Japan during the last two years are attributed to the shortage of feeds in the United States and to a smaller domestic production of cotton.
22,353,901	230,707	.010	38.6	35.4	
48	756	15.75	1.6	1.2	Dried beet pulp is a byproduct secured in the manufacture of sugar from sugar beets, and is used principally as cattle feed. As compared with domestic production, imports have been small, coming principally from Canada. Japan produces comparatively small quantities of beet pulp, and normally there are no exports of the product to the United States. Due to a curtailed sugar beet crop occasioned by the drought, and to a shortage of cattle feeds, conditions in the American market in 1934 and 1935 were particularly favorable for importation of the product, which accounts for the imports from Japan during this period. It is believed that with a return of normal conditions in the sugar beet areas, together with an increase in the domestic feed supply in general, imports of dried beet pulp into the United States from Japan will cease.
2,748	68,565	24.95	12.8	12.7	
(4)	(4)	(4)			In order of importance, United Kingdom, Germany, Czechoslovakia, and Japan are the chief sources of United States imports of malt liquors. Practically all imports from Japan consist of beer entered at Hawaii, where it competes with the product of the two local breweries and with American beers. By presidential proclamation, effective Feb. 15, 1935, the duty on beer was reduced to 50 cents per gallon ($15.50 per barrel). Comparing conditions of production of beer in continental United States and Japan it is unlikely that substantial imports will come into continental United States under the present rate of duty.
(4)	(4)	(4)			
(4)	(4)	(4)			
252,225	76,528	.303	17.5	6.9	
11,831	4,627	.391	2.6	.7	
712	258	.362	1.8	.4	
66,127	26,240	.397	12.4	4.9	

[4] Not separately reported.
[5] Rate changed by presidential proclamation, effective Feb. 15, 1935.

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TABLE 2.—*United States imports for consumption, of which imports from Japan were* 1935—Con

Par. (act of 1930)	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption		
			All countries	Japan			Total, all countries		
							Quantity	Value	Unit value
			Pct.	*Pct.*					
901	Cotton card laps, sliver, roving and waste, manufactured or advanced.	5 percent	5.0	5.0	1929	Pound	280,074	$39,275	$0.140
		do	5.0	5.0	1931	do	24,194	4,192	.173
		do	5.0	5.0	1932	do	326	41	.126
		do	5.0	5.0	1933	do	2,000	145	.073
		do	5.0	5.0	1934	do	97,483	7,502	.077
		do	5.0	5.0	1935[1]	do	465,799	33,723	.072
1115	Wool felt bodies, hoods, forms, and shapes for hats, bonnets, etc., not knit or crocheted; not pulled, stamped, blocked, trimmed, or finished.	Various	56.9	56.1	1929	do	6,294,768	9,167,212	1.46
		40 cents pound and 75 percent.[7]	114.1			do	221,772	226,886	1.02
		40 cents pound and 55 percent.[7]	106.2		1931	do	2,216,767	1,731,502	.781
		do	116.5		1932	do	1,890,971	1,230,726	.651
		do	113.0		1933	do	1,631,890	1,125,410	.690
		do	98.9	111.9	1934	do	1,757,239	1,601,961	.912
		do	98.7	115.0	1935[1]	do	1,200,088	1,097,514	.915
1669	Drugs of vegetable or animal origin, not edible, crude, not containing alcohol, n. s. p. f.	Free			1929	do	11,824,284	1,790,182	.151
		do			1931	do	7,093,497	1,136,751	.160
		do			1932	do	5,474,952	718,972	.131
		do			1933	do	7,646,447	658,979	.086
		do			1934	do	7,034,966	943,997	.134
		do			1935[1]	do	5,830,207	844,796	.145
1697	Rubber, crude	do			1929	do	1,254,582,931	239,177,811	.191
		do			1931	do	1,113,675,133	72,922,845	.065
		do			1932	do	917,406,276	31,936,459	.035
		do			1933	do	914,510,024	44,049,307	.048
		do			1934	do	1,006,909,454	97,929,676	.097
		do			1935[1]	do	716,319,896	81,821,445	.114
1727	Sesame seed	do			1929		(4)	(4)	(4)
		do			1931	Pound	136,608,257	3,606,037	.026
		do			1932	do	19,182,095	428,424	.022
		do			1933	do	42,630,809	817,758	.019
		do			1934	do	22,326,538	507,513	.023
		do			1935[1]	do	133,851,132	3,141,335	.023
1750	Waste bagging, gunny cloth, and bags for paper making.	do			1929	do	73,802,685	934,636	.013
		do			1931	do	30,552,794	415,707	.014
		do			1932	do	26,232,926	264,236	.010
		do			1933	do	42,587,980	366,459	.009
		do			1934	do	15,958,167	143,135	.009
		do			1935[1]	do	17,923,412	199,044	.011

[1] 8 months.
[4] Not separately reported.
[6] Less than 1/10 of 1 percent.
[7] Rate changed by presidential proclamation, effective Apr. 15, 1931.

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valued at less than $12,000 in 1934 but more than $25,000 in the first 8 months of tinued

Imports for consumption—Continued					
Japan			Proportion from Japan		Comments
Quantity	Value	Unit value	Quantity	Value	
			Pct.	*Pct.*	
213,700	$13,063	$0.061	76.3	33.3	Cotton card laps, sliver, and roving are partial manufactures of cotton. Cotton waste is part of the original raw mater al which has been discarded in the sequence of manufacturing processes. In the form produced, cotton waste is on the free list (par. 1662), but when bleached, dyed or otherwise advanced it is dutiable under paragraph 901 (c). Imports under this classification are insignificant when compared to domestic production, and consist almost entirely of cotton waste; imports of card laps, sliver, and roving have always been negligible. Prior to 1932, 90 percent of imports came from the United Kingdom. In 1933 and 1934 all imports were from Japan, and the first 8 months of 1935, Japan supplied over 92 percent of total imports. The imports from Japan in 1933, 1934, and 1935 averaged less than 8 cents per pound.
2,000	194	.097	8.3	4.6	
200	6	.030	61.3	14.6	
2,000	145	.073	100.0	100.0	
97,483	7,502	.077	100.0	100.0	
430,730	31,122	.072	92.5	92.3	
993	1,936	1.95	(6)	(6)	Wool-felt hat bodies are made from wool noils and wool. Imports are almost exclusively hat bodies to be finished in the United States into hats for women. Domestic production supplied 47.7 percent of apparent domestic consumption in 1934. Italy has been the principal source of imports, followed by France. Japan became a competitor in 1935, supplying in quantity 12.6 percent of total imports in the first 8 months of that year, as compared with 1/10 of 1 percent of total imports in 1934. It is stated in the trade that the Japanese bodies are lower in grade than those imported from Italy. Japanese export statistics indicate that the capacity of the industry in Japan is not sufficient to supply the American market with the volume heretofore imported from Italy.
1,832	1,288	.703	.1	.1	
151,042	100,611	.666	12.6	9.2	
227,197	20,761	.091	1.9	1.2	There are no statistics available showing the kinds of drugs imported under this classification. The chief supplier of imports is British India, but at least 8 or 10 other countries are important in the trade. Japan was not an important supplier until 1935.
42,550	6,746	.159	.6	.6	
117,781	13,712	.116	2.2	1.9	
13,893	1,557	.112	.2	.2	
29,563	1,653	.056	.4	.2	
1,970,422	175,302	.089	33.8	20.8	
67,200	16,278	.242	(6)	(6)	
392,224	13,075	.033	(6)	(6)	
244,712	7,537	.031			
224,224	26,909	.120	(6)	(6)	Crude rubber is a hydrocarbon gum obtained by tapping certain species of trees and coagulating the resulting milk, or latex. The chief world supply is obtained in British Malaya, Netherland East Indies, and Ceylon. Of the total crude rubber absorbed in the United States in 1933, 78 percent was used in tire manufacture. British Malaya and Netherland East Indies are the principal suppliers of imports into the United States. Imports of crude rubber from Japan have always been negligible and have amounted to less than 1/10 of 1 percent of total imports for each year from 1929 to 1935, inclusive. Exports of crude rubber Japan are believed to be reexports.
(6)	(6)	(6)			
69,144	3,976	.058	.1	.1	Sesame seed is the product of an annual herbaceous plant cultivated throughout the warmer regions of the world. It is an important source of edible oil, which in the United States is used principally as a salad oil and in vegetable shortenings. The cake or meal is a valuable feed. There is no record of any commercial production of sesame seed in the United States, and it is competitive only with similar seeds produced in this country, principally cottonseed. China is the chief source of supply, and Japan has furnished less than 1 percent of total imports. However, the value of imports from Japan jumped from $3,624 in 1934, to $37,994 in the first 8 months of 1935. The marked increase in the imports in 1935 is believed to be at least partly due to the shortage of domestic oil seeds caused by the drought, the curtailment of the cotton crop, and the decreased output of lard, with consequent increase in domestic prices of edible oils and fats.
39,484	1,654	.042	.2	.4	
73,422	2,409	.033	.2	.3	
110,503	3,624	.033	.5	.7	
1,267,605	37,994	.030	.9	1.2	
3,443,888	37,523	.011	4.7	4.0	The total consumption in the United States of waste bagging, gunny cloth, and bags for paper making is not separately recorded in census statistics. The United Kingdom was the principal supplier of imports into the United States in 1934, followed by Belgium, France, and Italy. Imports from Japan in 1934 declined substantially due to a lack of demand in this country, but with increased production in the domestic paper industry in 1935 there were large imports from Japan.
1,421,340	19,550	.014	4.7	4.7	
2,739,445	49,837	.018	10.4	18.9	
6,686,129	52,059	.008	15.7	14.2	
397,264	5,652	.014	2.5	3.9	
4,602,016	65,262	.014	25.7	32.8	

Source: Statistics of imports for the year 1934 were taken from Foreign Commerce and Navigation of the United States. Statistics of imports for other years were compiled from monthly reports (in code) supplied by the Bureau of Foreign and Domestic Commerce.

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TABLE 3.—*United States imports for consumption of commodities of which imports from Japan were valued at less than $12,000 in 1934 but of which Japan was the principal supplier in 1934 or of which Japan supplied imports valued at more than $8,000 in the first 8 months of 1935*

Paragraph (act of 1930)	Commodity	Rate of duty in 1934	Imports for consumption		
			Total all countries, 1934	Japan	
				1934	1935 (8 months)
31	Transparent sheets of cellulose compounds (except cellulose acetate), more than 3/1000 inch and not more than 32/1000 inch thick.	45 cents pound	$9,995	$9,488	$2,959
31	Sheets of cellulose compounds (except cellulose acetate), not elsewhere specified.	40 cents pound	16,025	6,856	6,945
31	Sheets, bands, and strips of transparent cellulose film.	45 percent	16,595	10,807	14,978
32	Compounds of cellulose, known as vulcanized or hard rubber.	30 percent	1,133	290	----------
38	Tanning extracts, n. s. p. f.	15 percent	2,728	940	768
43	Writing and copying ink and ink powders	10 percent	6,733	3,313	562
43	Ink and ink powders, other than drawing, printing, or writing.	do	11,988	3,455	550
54	Peanut oil	4 cents pound	136,163	102	9,355
58	Cornmint oil	25 percent	2,693	2,693	1,147
63	Phosphorus	8 cents pound	5,790	3,598	2,566
64	Plasters, healing or curative, and court plaster	20 percent	8,089	2,962	796
78	Potassium iodide	25 cents pound	11,738	11,698	532
83	Corn starch	1½ cents pound.	20	20	----------
205	Manufactures of which plaster of paris is the component material of chief value, other than statues, statuettes, and bas-reliefs, n. s. p. f.	35 percent	9,109	4,922	4,720
211	Earthenware and stoneware (other than household and kitchen articles and sanitary earthenware) including filter tubes, not decorated.	10 cents dozen and 45 percent.	31,870	11,481	40,189
218	Hypodermic syringes, wholly of glass	85 percent	1,385	1,239	401
218	Biological, chemical, metallurgical, pharmaceutical, and surgical articles and utensils of all kinds, wholly or in chief value of glass, other than lamp-blown and volumetric ware, hypodermic syringes, and thermometers.	do	155,035	9,791	9,427
218	Christmas tree ornaments of glass, blown or partly blown.	60 percent	470,921	9,365	10,233
225	Spectacles, eyeglasses, goggles, frames, mountings, and parts of cellulose compounds, valued over 65 cents, not over $2.50 per dozen.	60 cents dozen and 20 percent.	2,490	2,328	1,096
225	Spectacles, eyeglasses, goggles, frames, mountings, and parts, other than of cellulose compounds, valued not over 65 cents per dozen.	20 cents dozen and 15 percent.	6,236	6,180	2,273
225	Spectacles, eyeglasses, goggles, frames, mountings, and parts, other than of cellulose compounds, valued over $2.50 per dozen.	40 percent	2,214	1,197	94
228	Microscopes, other than tripod, magnifiers, reading glasses, and engravers' loupes.	45 percent	81,798	8,949	1,796
228	Opera and field glasses, except prism-binoculars	do	19,149	3,090	10,720
229	Electric lamps, incandescent, carbon or other nonmetallic filament, miniature.	30 percent	109	109	606
229	Electric lamps, incandescent, carbon or other nonmetallic filament, other than miniature.	do	1,290	747	898
328	Tanks or vessels, cylindrical or tubular, for holding gas, liquids, or other material, full or empty.	25 percent	457,894	8,134	11,472
339	Hollow tinware	40 percent	7,502	3,126	467
339	Gold-plated table, household, kitchen, and hospital utensils, and hollow or flatware n. s. p. f.	65 percent	22,322	9,426	4,829
340	Hacksaw blades	20 percent	8,502	3,349	1,293
341	Engraved plates of iron or steel for designs on glass.	25 percent	207	207	26
342	Umbrella and parasol ribs and stretchers of metal, and tubes for umbrellas.	60 percent	2,112	214	9,712
343	Needle cases or books, with assortments of needles.	45 percent	9,327	3,938	8,158
345	Saddlery or riding bridle hardware of metal, plated with gold or silver.	60 percent	41	32	----------
353	Electric batteries, other than storage	35 percent	924	104	455
354	Pen, pocket, clasp, pruning, budding, eraser, manicure, and other knives with folding blades, valued not over 40 cents per dozen.	1¼ cents each and 50 percent.	10,814	7,216	16,635

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TABLE 3.—*United States imports for consumption of commodities of which imports from Japan were valued at less than $12,000 in 1934 but of which Japan was the principal supplier in 1934 or of which Japan supplied imports valued at more than $8,000 in the first 8 months of 1935*—Continued

Paragraph (act of 1930)	Commodity	Rate of duty in 1934	Imports for consumption		
			Total all countries, 1934	Japan	
				1934	1935 (8 months)
357	Pruning and sheep shears and blades for, valued not over 50 cents per dozen.	3½ cents each and 45 per cent.	$679	$679	$304
357	Pruning and sheep shears and blades for, valued over 50 cents, and not over $1.75 per dozen.	15 cents each and 45 per cent.	52	52	10
357	Scissors, shears, not elsewhere specified, and blades for, valued not over 50 cents per dozen.	3½ cents each and 45 per cent.	630	328	412
357	Clippers, nail, barbers', and animal, valued over 50 cents, and not over $1.75 per dozen.	15 cents each and 45 per cent.	5	5	13
363	Swords and sidearms of metal	50 percent	13,009	1,236	1,179
364	Bicycle, velocipede, and similar bells, finished or unfinished.	70 percent	864	864	4,940
364	Parts of bicycle, velocipede, and similar bells	do	19	11	
369	Inner tubes for automobile tires	25 percent	1,105	512	150
372	Cash registers	do	1,033	413	602
397	Candlesticks of metal, not plated with platinum, gold, or silver, or colored with gold lacquer.	45 percent	3,463	1,717	20
397	Lighting articles plated with platinum, gold, or silver.	65 percent	668	333	
397	Hinges and hinge blanks of iron or steel	45 percent	27,940	9,713	10,087
397	Slide fasteners	do	(1)	(1)	24,170
408	Barrels, boxes, and other wooden containers of oranges, lemons, limes, grapefruit, and shaddocks or pomelos, of foreign manufacture.	25 percent	23,191	5,561	
410	Toothpicks of wood or other vegetable substance.	do	11,027	9,236	13,707
411	Straw baskets and bags	50 percent	24,904	7,149	14,647
411	Papier-maché and palm-leaf baskets and bags	do	1,582	1,060	2,909
717	Frozen halibut	2 cents pound	29,977	11,167	1,720
719	Fish, pickled or salted, n. s. p. f., in containers (not airtight) weighing, with contents, not more than 15 pounds each.	25 percent	518	260	15
720	Fish, prepared or preserved, n. s. p. f., in containers weighing, with contents, not more than 15 pounds each.	do	8,934	5,252	966
721	Fish roe, n. s. p. f. (not boiled or packed in airtight containers).	20 cents pound	12,694	6,396	94
723	Buckwheat	¼ cent pound	9,446	5,222	442
730	Coconut or copra oil cake and oil-cake meal, other than from the Philippine Islands.	3/10 cent pound	8,760	8,753	7,721
730	Hempseed meal (not fertilizer)	do	1,409	1,409	871
730	Oil cake and oil-cake meal, n. s. p. f.	do	4,496	2,810	12,348
748	Prunes, prunellas, and plums, green, ripe, or in brine.	½ cent pound	14,803	10,043	6,403
749	Pears, prepared or preserved, otherwise than dried, desiccated, or evaporated, or in brine.	35 percent	236	93	None
759	Peanuts, not shelled	4¼ cents pound.	7,157	2,924	2,576
759	Peanut butter	7 cents pound	17	17	None
760	Walnuts, shelled	15 cents pound	915,643	7,535	9,381
762	Soybeans	2 cents pound	7,189	5,989	2,916
763	Millet seed	1 cent pound	37,363	2,647	20,921
765	Beans, n. s. p. f., canned or otherwise prepared or preserved.	3 cents pound [2]	8,562	3,495	2,471
775	Pastes, balls, puddings, hash, and similar mixtures of vegetables, meat, or fish, n. s. p. f.	35 percent	8,347	4,378	3,247
908	Tapestries and other jacquard figured upholstery cloths, of cotton or other vegetable fiber (not including pile fabrics or bed ticking).	55 percent	799,769	4,486	13,929
909	Cotton velveteens, twill back	44 percent	18,461	2,080	889
909	Manufactures of cotton velveteens and velvets.	62½ percent	7,461	3,920	2,846
911	Cotton blankets, jacquard-figured	45 percent	27	27	103
911	Cotton towels, other than pile fabric, jacquard-figured (not terry woven).	40 percent	8,036	6,007	7,107

[1] Not separately reported.

[2] On the entire contents of the container.

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TABLE 3.—*United States imports for consumption of commodities of which imports from Japan were valued at less than $12,000 in 1934 but of which Japan was the principal supplier in 1934 or of which Japan supplied imports valued at more than $8,000 in the first 8 months of 1935*—Continued

Paragraph (act of 1930)	Commodity	Rate of duty in 1934	Imports for consumption		
			Total all countries, 1934	Japan	
				1934	1935 (8 months)
912	Lacings for boots, shoes, and corsets, of cotton or vegetable fiber.	30 percent	$75	$48	None.
913	Belts and belting for machinery, of vegetable fiber and India rubber.	do	42,315	1,764	$15,852
916	Cotton hose and half-hose, made or cut from knitted fabrics, n. s. p. f.	do	5,432	5,163	5,711
919	Men's cotton shirts, not knit or crocheted	45 percent	11,397	6,259	3,909
1009	Woven fabrics of hemp or ramie, over 30, not over 100 threads in warp and filling to the square inch, weighing from 4 to 12 ounces, inclusive, per square yard, over 12, not over 36 inches wide.	55 percent	282	282	None.
1021	Carpets, carpeting, mats or rugs of flax or hemp	35 percent	2,980	1,725	196
1023	Manufactures of flax, n. s. p. f.	40 percent	2,153,753	8,358	8,222
1108	Worsteds, weighing not over 4 ounces per square yard, without warp of cotton or other vegetable fiber, valued not over $1 25 per pound.	50 cents pound and 50 percent.	8,003	6,105	906
1109	Woolens, weighing over 4 ounces per square yard, valued not over $1.25 per pound.	do	721,970	2,145	9,959
1114	Knit hats, hoods, berets, etc., of wool valued not over $2 per pound.	44 cents pound and 45 percent.	376,362	788	12,089
1114	Outerwear and other articles of wool, knit or crocheted, n. s. p. f., valued not over $2 per pound.	do	31,373	7,994	20,247
1201	Partially manufactured silk, and silk noils exceeding 2 inches in length, not twisted or spun.	35 percent	651	508	5,635
1202	Spun silk or schappe silk yarn, or yarn of silk and rayon, or other synthetic textile and roving, plied, not bleached, dyed or colored, exceeding No. 200.	50 percent	142	142	None.
1202	Spun silk or schappe silk yarn, or yarn of silk and rayon or other synthetic textile and roving, plied, bleached, dyed, or colored.	do	947	696	287
1204	Sewing silk, twist, floss, and silk threads or yarns, n. s. p. f.	40 percent	4,764	1,502	800
1205	Woven fabrics, except pile, not over 30 inches in width (including umbrella silk or Gloria cloth), not Jacquard-figured, all silk, in the gray (in the gum or ungummed).	60 percent	6,833	4,822	866
1205	Woven fabrics, except pile, not over 30 inches in width (including umbrella silk or Gloria cloth), Jacquard-figured, all silk, in the gray (in the gum or ungummed).	65 percent	156	156	None.
1205	Woven fabrics, except pile, over 30 inches wide, Jacquard-figured, all silk, in the gray (in the gum or ungummed).	do	644	374	390
1206	Manufactures of silk velvets (except ribbons). pile wholly cut or wholly uncut.	do	3,901	1,107	788
1207	Silk cords and tassels	55 percent	1,992	1,182	56
1210	Men's silk shirts (not knit or crocheted), not embroidered.	65 percent	1,683	1,396	1,945
1306	Rayon or other synthetic textile woven fabrics of yarn (except pile), not Jacquard-figured.	45 cents pound and 60 percent.	442,343	8,029	16,479
1307	Rayon or other synthetic textile pile ribbons, pile wholly cut or wholly uncut.	do	4,566	673	None.
1308	Rayon and other synthetic textile fabrics with fast edges, n. s. p. f., not over 12 inches wide, and articles made therefrom, including garters, suspenders, and braces, other than ribbons, not jacquard-figured.	do	6,899	800	645
1308	Rayon and other synthetic textile cords and tassels.	do	409	44	108
1309	Rayon or other synthetic textile hose and half hose, knit or crocheted of yarn.	45 cents pound and 65 percent.	13	13	433
1309	Rayon or other synthetic textile hats and hoods, knit or crocheted, not of yarn (visca or cellophane, etc.).	do	8,281	6,651	509

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TABLE 3.—*United States imports for consumption of commodities of which imports from Japan were valued at less than $12,000 in 1934 but of which Japan was the principal supplier in 1934 or of which Japan supplied imports valued at more than $8,000 in the first 8 months of 1935*—Continued

Paragraph (act of 1930)	Commodity	Rate of duty in 1934	Imports for consumption		
			Total all countries, 1934	Japan	
				1934	1935 (8 months)
1310	Rayon or other synthetic textile handkerchiefs and woven mufflers, hemmed or hemstitched, not embroidered.	45 cents pound and 65 percent.	$17,905	$2,326	$477
1311	Rayon or other synthetic textile hats and hoods, not knit or crocheted, not of yarn (visca, cellophane, etc.), not made of braids.	-----do-----	11,385	4,137	837
1312	Other manufactures of rayon, or other synthetic textile filaments, fibers, yarns, or threads, n. s. p. f.	-----do-----	26,207	4,422	2,573
1404	Copying paper, weighing over 6 pounds and less than 10 pounds to the ream.	5 cents pound and 15 percent.	8,328	6,166	10,538
1404	Bibulous paper, weighing over 6 pounds and less than 10 pounds to the ream.	-----do-----	4,632	4,632	3,762
1404	Crepe paper	6 cents pound and 15 percent.	3,328	2,239	2,207
1405	Grease-proof and imitation parchment paper, supercalendered and transparent.	3 cents pound and 15 percent.	639	449	None
1406	Decalcomanias in ceramic colors, weighing per 1,000 sheets on the basis of 20 by 30 inches not over 100 pounds.	$1.25 pound and 15 percent.	1,348	1,069	1,061
1406	Transparencies, printed lithographically or otherwise, of more than 5 printings.	50 percent-----	188	132	None
1406	Lithographic prints, other than cigar bands, labels, and flaps, decalcomanias, and post cards, exceeding 20/1000 inch in thickness.	8¾ cents pound	17,287	1,794	209
1407	Writing, letter, and note paper and correspondence cards, weighing 8 pounds or over per ream, in rolls or in sheets 110 square inches or more in area, ruled, bordered, embossed, printed, lined, or decorated.	3 cents pound and 25 percent.	10,406	3,870	8,073
1407	Writing, letter, and note paper and correspondence cards, weighing 8 pounds or over per ream in sheets less than 110 square inches in area, not ruled, bordered, embossed, printed, lined, or decorated.	3 cents pound and 20 percent.	3,224	149	37
1407	Other paper weighing 8 pounds or over per ream, except drawing paper and bristol-board, ruled, bordered, embossed, printed, lined, or decorated.	3 cents pound and 25 percent.	4,572	1,572	4,320
1407	Other paper weighing 8 pounds or over per ream, except drawing paper and bristol-board, not ruled, bordered, embossed, printed, lined, or decorated.	3 cents pound and 15 percent.	31,668	7,163	5,024
1408	Envelopes, filled or unfilled, tinted, bordered, embossed, printed, lined, or decorated, except lithographic, made of unruled writing, letter, and note paper, in rolls or sheets 110 square inches in area.	3 cents pound and 35 percent.	506	100	24
1411	Albums, photograph, autograph, scrap, postcard, postage-stamp, and for phonograph records.	30 percent-----	13,091	5,236	6,155
1413	Ribbon flycatchers	35 percent-----	175,839	9,666	23,705
1503	Imitation pearl beads, solid iridescent, valued not more than 10 cents per inch.	90 percent-----	45	45	43
1503	Ivory beads	45 percent-----	6,052	3,892	435
1504	Hat braids, plaits, and laces, other than of straw or manila hemp, not bleached, dyed, colored, or stained.	15 percent-----	2,636	1,262	None.
1504	Hat braids, plaits, and laces, other than of straw or manila hemp, bleached, dyed, colored, or stained.	25 percent-----	3,832	1,608	711
1504	Hat braids, plaits, and laces, of manila hemp, bleached, dyed, colored, or stained.	-----do-----	1,925	1,863	500
1504	Willow sheets or squares for making or ornamenting hats, bonnets, or hoods, not bleached, dyed, or colored.	15 percent-----	999	849	697

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TABLE 3.—*United States imports for consumption of commodities of which imports from Japan were valued at less than $12,000 in 1934 but of which Japan was the principal supplier in 1934 or of which Japan supplied imports valued at more than $8,000 in the first 8 months of 1935*—Continued

Paragraph (act of 1930)	Commodity	Rate of duty in 1934	Imports for consumption		
			Total all countries, 1934	Japan	
				1934	1935 (8 months)
1504	Willow sheets or squares, for making or ornamenting hats, bonnets or hoods, bleached, or dyed, or colored.	25 percent	$277	$277	None.
1506	Brooms	do	8,096	4,256	$1,923
1506	Hairbrushes, having handles or backs of cellulose compounds (celluloid, etc.).	2 cents each and 50 per cent.	9,674	9,674	5,799
1506	Handles or backs of cellulose compounds (celluloid, etc.) for toilet brushes, other than tooth brushes.	1 cent each and 50 per cent.	286	52	----------
1509	Pearl or shell, fresh water, buttons	1¾ cents line per gross and 25 percent.	1,289	1,289	391
1510	Collar and cuff buttons and studs of bone, mother-of-pearl, ivory, vegetable ivory, or agate.	45 percent	227	47	20
1510	Roman pearl and fancy buttons with a fish scale or similar finish.	do	61	61	154
1511	Cork stoppers, ¾ inch and less in diameter at large end, made from artificial or composition cork.	12½ cents pound.	30	30	None.
1513	Dolls, doll heads, and parts, containing lace or embroidery.	90 percent	2,603	713	422
1513	Toy marbles	70 percent	2,676	1,537	1,536
1515	Firecrackers, except those over 5/16 inch outside diameter, or more than 1¾ inches long.	8 cents pound	543,164	8,550	15,657
1515	Bombs, rockets, Roman candles, and other fireworks, n. s. p. f.	12 cents pound	8,072	5,877	12,198
1516	Friction or lucifer matches, not elsewhere specified, in packages other than in boxes containing not more than 100 matches.	2¾ cents M	12	12	11
1516	Wax and wind matches, and matches in books or folders.	40 percent	365	219	199
1518	Feather dusters	45 percent	643	264	568
1518	Natural leaves, plants, shrubs, herbs, trees, grasses, grains, and parts, n. s. p. f., colored, dyed, painted, or chemically treated.	75 percent	75	53	----------
1518	Artificial flowers, etc., of yarns, threads, filaments, tinsel wire, rayon, etc., and articles thereof, n. s. p. f.	90 percent	93,150	10,549	8,106
1527	Chains, not elsewhere specified, and other articles of personal adornment, not jewelry (except buttons), other than gold or platinum, whether or not enameled or plated, or set with precious or semiprecious stones or imitations, valued over 20 cents and not over $1 per dozen.	110 per cent	21,835	9,330	10,726
1529	Articles or fabrics of cotton, other than wearing apparel, with threads omitted, drawn, punched, or cut, and threads introduced after weaving for ornament, n. s. p. f.	90 percent	9,799	9,585	9,638
1529	Articles or woven fabrics of flax, hemp, and ramie, other than wearing apparel, with threads omitted, drawn, punched, or cut, and threads introduced after weaving for ornament, n. s. p. f.	do	11,944	7,346	2,300
1529	Outerwear and other articles of wool wearing apparel, knitted or crocheted, n. s. p. f., embroidered.	do	21,395	4,706	723
1529	Silk wearing apparel, embroidered knit goods, n. s. p. f.	do	2,969	1,168	3,163
1529	Rayon or other synthetic textile articles, other than wearing apparel, wholly or in part of lace, not elsewhere specified.	do	9,594	8,666	206
1529	Rayon or other synthetic textile embroideries, including edgings, insertings, and galloons, n. s. p. f.	do	1,262	724	235
1529	Beaded ornaments, n. s. p. f.	do	615	236	351

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TABLE 3.—*United States imports for consumption of commodities of which imports from Japan were valued at less than $12,000 in 1934 but of which Japan was the principal supplier in 1934 or of which Japan supplied imports valued at more than $8,000 in the first 8 months of 1935*—Continued

Paragraph act of 1930	Commodity	Rate of duty in 1934	Imports for consumption		
			Total all countries, 1934	Japan	
				1934	1935 (8 months)
1529	Silk handkerchiefs, embroidered, tamboured, appliqued, or with threads omitted, etc., not made with hand-rolled or handmade hems, valued at more than 70 cents per dozen.	4 cents each and 40 percent.	$2,312	$940	$38
1529	Silk handkerchiefs, embroidered, tamboured, appliqued, or with threads omitted, etc., made with hand-rolled or handmade hems.	do	2,528	1,770	None.
1530	Men's and boys' leather boots and shoes, turn or turned, n. s. p. f.	10 percent	5,170	244	None.
1530	Leather slippers (for house wear)	20 percent	24,685	6,837	2,863
1532	Gloves of leather made from horsehide or cowhide (except calfskin).	25 percent	1,032	169	20
1533	Catgut (other than for tennis rackets and surgical use), whip gut, and oriental gut, and manufactures of worm and other gut, n. s. p. f.	40 percent	9,718	2,434	2,290
1535	Artificial flies, snelled hooks, and leaders or casts used in fishing.	55 percent	51,297	11,616	8,487
1536	Wax candles	27½ percent [3]	8,622	4,751	3,024
1536	Candles, other than wax	do	1,235	330	25
1537	Druggists' sundries of soft rubber	25 percent	65,545	8,857	16,988
1537	Combs, except wholly of metal, valued at $4.50 or less per gross, other than cellulose, hard rubber, horn, or horn and metal, n. s. p. f.	1 cent each and 25 percent.	1,832	779	806
1540	Moss and sea grass, eelgrass, and seaweeds, dyed, or manufactured.	10 percent	14,047	9,830	8,043
1541	Pianos, including player pianos	40 percent	10,126	59	33
1541	Organs, except pipe, n. s. p. f.	do	219	13	64
1542	Phonographs, gramophones, graphophones, dictaphones, and similar articles, n. s. p. f.	30 percent	11,584	4,322	6,237
1542	Needles for phonographs, gramophones, and similar articles.	8 cents M and 45 percent.	3,569	2,451	1,360
1549	Pencils of lead or other material not metal, n. s. p. f.	50 cents gross and 30 percent.	356,717	10,860	2,720
1549	Point protectors or clips on pencils	25 cents gross	[4]	[4]	[4]
1550	Gold pens	25 cents gross and 20 percent.	9	9	None.
1550	Combination penholders, comprising pencil, eraser, automatic stamp, or other attachments.	do	180	107	6
1550	Penholders, tips, and parts	do	8,172	5,122	2,823
1550	Fountain pens and holders, stylographic pens and parts, of cellulose compounds (celluloid, etc.).	6 cents each and 40 percent.	1,467	1,369	141
1550	Fountain pens and holders, stylographic pens, and parts, other than of cellulose compounds (celluloid, etc.)	do	1,743	1,498	1,116
1550	Mechanical pencils of cellulose compounds (celluloid, etc.).	45 cents gross and 40 percent.	3,122	3,104	2,244
1551	Cameras, n. s. p. f. of which the lens is not the component of chief value.	20 percent	537,867	10,177	10,060
1553	Parts of thermostatic bottles, carafes, jars, jugs, and other containers, blanks and pistons, n. s. p. f.	55 percent	174	74	76
1554	Handles and sticks, for umbrellas, parasols, sunshades, walking canes, of cellulose compounds (celluloid, etc.).	40 percent	331	331	None.
1555	Waste, n. s. p. f.	10 percent	760,530	11,770	12,445
1604	Agricultural machinery, implements, and parts, n. s. p. f.	Free	664,312	6,541	12,292
1615	Quicksilver flasks or bottles and drums of iron, steel, or other metal, for acids or other chemicals.	do	1,091,858	4,479	16,157
1630	Braille tablets, cubarithms, special apparatus and objects for teaching, and printing apparatus, machines, presses, and types for the blind.	do	9	9	None

[3] Taxable at 1 cent per pound under sec. 601 (c) (4) of the Revenue Act of 1932, if a petroleum wax product.
[4] Values not recorded, Japan was first in quantity.

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TABLE 3.—*United States imports for consumption of commodities of which imports from Japan were valued at less than $12,000 in 1934 but of which Japan was the principal supplier in 1934 or of which Japan supplied imports valued at more than $8,000 in the first 8 months of 1935*—Continued

Paragraph act of 1930	Commodity	Rate of duty in 1934	Imports for consumption		
			Total all countries, 1934	Japan	
				1934	1935 (8 months)
1674	Palm leaf, natural	Free	$1,763	$642	$107
1677	Live goldfish	do	5,093	5,083	3,018
1677	Fish for other than human consumption, not elsewhere specified.	do	119,843	7,334	22,462
1681	Dog skins, undressed	do	3,367	3,367	None.
1681	Fur skins, n. s. p. f., undressed	do	1,403,514	9,015	12,532
1681	Badger furs, undressed	do	419,723	10,221	15,922
1703	Joss stick or joss light	do	18,419	8,896	6,518
1705	Kelp	do	124	124	143
1726	Film negatives for motion pictures, undeveloped, of American manufacture, exposed abroad for silent or sound news reels.	do	17,343	1,425	490
1727	Hempseed	do	175,744	9,483	28,946
1727	Kapock seed	do	136,984	None	9,120
1744	Platinum, grain, nuggets, sponge, or scrap	do	2,925,153	None	13,803
1755	Sausage casings of sheep, lamb, and goat	do	7,859,736	3,362	12,277
1764	Skeletons and anatomical preparations	do	5,347	2,094	158
1766	Sodium bicarbonate or baking soda	do	209	108	None
1786	Tin in bars, blocks, pigs, grain, granulated, or scrap and alloys, chief value tin, n. s. p. f.	do	44,800,650	None	11,286
1803	Maple, birch, and beech sawed boards, planks, deals, and sawed timber, not elsewhere specified (except flooring).[6]	$3 M feet	508,771	6,468	12,856

[6] Dutiable under Revenue Act of 1932 until June 12, 1934, when provision was repealed.

Sources: Statistics of imports for 1934 were taken from Foreign Commerce and Navigation of the United States. Statistics of imports for 1935 were compiled from monthly reports (in code) supplied by the Bureau of Foreign and Domestic Commerce.

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TABLE 4.—*United States imports for consumption of commodities important in the trade with Kwantung*

Paragraph, act of 1930	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption							
							Total all countries			Kwantung			Proportion from Kwantung	
			All countries	Kwantung			Quantity	Value	Unit value	Quantity	Value	Unit value	Quantity	Value
			Percent	*Percent*									*Percent*	*Percent*
53	Hempseed oil	1½ cents pound			1929	Pound								
		do			1931	do								
		do			1932	do								
		do	25.5		1933	do	60,000	$3,527	$0.059					
		do	32.7	32.7	1934	do	412,680	18,927	.046	412,680	$18,927	$0.046	100.0	100.0
		do	29.0	29.2	1935[1]	do	259,662	13,444	.052	219,662	11,301	.051	84.6	84.1
54	Soybean oil	2½ cents pound	40.4	40.7	1929	do	16,317,173	1,008,636	.062	11,670,504	717,010	.061	71.5	71.1
		3½ cents pound, but not less than 45 percent.	97.7	100.4	1931	do	3,878,727	138,965	.036	3,581,952	124,900	.035	92.3	89.9
		do	125.7	128.2	1932	do	404,572	11,267	.028	400,096	10,919	.027	98.9	96.9
		do	111.6	111.6	1933	do	2,035,352	63,835	.031	2,035,200	63,824	.031	100.0	100.0
		do	108.7	110.9	1934	do	2,828,523	91,043	.032	1,614,436	50,964	.032	57.1	56.0
		do	79.2	90.1	1935[1]	do	11,243,187	496,872	.044	7,371,128	286,352	.039	65.6	57.6
724	Corn	15 cents bushel	13.7	15.9	1929	Bushel of 56 pounds.	399,138	438,292	1.10	37,498	35,435	.94	9.4	8.1
		25 cents bushel	46.7		1931	do	617,144	330,132	.54					
		do	[2] 52.2		1932	do	347,627	166,605	.48					
		do	[2] 52.3		1933	do	160,288	76,609	.48					
		do	[2] 48.4	46.0	1934	do	2,959,256	1,529,933	.52	53,573	29,132	.54	1.8	1.9
		do	51.2	43.7	1935[1]	do	34,803,834	16,986,801	.49	25,001	14,287	.57	.1	.1
730	Soybean oil cake and oil-cake meal.	Free			1929	Pound	171,854,858	3,618,335	.021	101,466,161	2,064,127	.020	59.0	57.0
		3/10 cents pound	27.1	28.4	1931	do	39,620,454	438,804	.011	31,005,738	327,734	.011	78.3	74.7
		do	32.1	32.0	1932	do	36,568,700	341,857	.009	31,377,365	294,078	.009	85.8	86.0
		do	34.1	33.8	1933	do	66,701,815	586,998	.009	56,936,941	505,012	.009	85.4	86.0
		do	30.9	30.9	1934	do	60,387,348	586,784	.010	52,873,786	512,772	.010	87.6	87.4
		do	28.6	29.2	1935[1]	do	99,821,914	1,047,663	.010	86,550,127	889,944	.010	86.7	84.9

[1] 9 months.

[2] Does not include the 20-percent reduction on imports from Cuba.

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TABLE 4.—*United States imports for consumption of commodities important in the trade with Kwantung*—Continued

Paragraph, act of 1930	Commodity	Rate of duty	Average ad valorem equivalent on imports from—		Year	Unit of quantity	Imports for consumption							
							Total all countries			Kwantung			Proportion from Kwantung	
			All countries	Kwantung			Quantity	Value	Unit value	Quantity	Value	Unit value	Quantity	Value
			Percent	*Percent*									*Percent*	*Percent*
762	Castor beans	½ cent pound	14.1	12.9	1929	Pound	175,392,363	$6,227,542	$0.036	818,750	$31,846	$0.039	0.5	0.5
		do	21.9	18.1	1931	do	103,214,816	2,358,763	.023	893,760	24,657	.028	.9	1.0
		do	25.9	33.3	1932	do	83,156,166	1,604,193	.019	194,521	2,918	.015	.2	.2
		do	29.9	35.1	1933	do	109,965,250	1,838,463	.017	5,129,966	72,976	.014	4.7	4.0
		do	26.7	28.1	1934	do	92,839,588	1,738,462	.019	7,974,680	142,072	.018	8.6	8.2
		do	22.1	24.1	1935[1]	do	51,140,143	1,156,761	.023	13,151,549	273,203	.021	25.7	23.6
763	Millet seed	1 cent pound	43.3	-------	1929	do	969,526	22,392	.023	-------	-------	-------	-------	-------
		do	76.6	119.5	1931	do	1,112,920	14,522	.013	246,730	2,065	.008	22.2	14.2
		do	88.0	103.3	1932	do	1,361,529	15,478	.011	1,108,328	10,725	.010	81.4	69.3
		do	108.1	136.3	1933	do	827,342	7,652	.009	566,760	4,158	.007	68.5	54.3
		do	68.2	81.3	1934	do	2,547,184	37,363	.015	1,405,220	17,280	.012	55.2	46.2
		do	66.1	69.3	1935[1]	do	19,006,622	287,758	.015	5,367,499	77,483	.014	28.2	26.9
1507	Bristles, sorted, bunched, or prepared.	7 cents pound	5.3	3.9	1929	do	5,009,482	6,653,726	1.33	39,166	69,928	1.79	.8	1.0
		3 cents pound	3.3	-------	1931	do	4,176,665	3,756,463	.90	-------	-------	-------	-------	-------
		do	4.2	-------	1932	do	3,240,975	2,295,532	.71	-------	-------	-------	-------	-------
		do	3.8	4.5	1933	do	4,945,406	3,941,355	.80	44,820	29,969	.67	.9	.8
		do	2.6	2.8	1934	do	4,143,049	4,745,059	1.15	44,110	46,654	1.06	1.1	1.0
		do	2.3	2.1	1935[1]	do	3,392,663	4,373,698	1.29	18,007	25,916	1.44	.5	.6
1681	Kolinski furs, undressed	Free	-------	-------	1929	Number	638,025	2,227,515	3.49	6,800	26,950	3.96	1.1	1.2
		do	-------	-------	1931	do	634,627	840,337	1.32	-------	-------	-------	-------	-------
		do	-------	-------	1932	do	771,155	865,669	1.12	51,189	70,428	1.38	6.6	8.1
		do	-------	-------	1933	do	735,759	780,288	1.06	2,000	2,079	1.04	.3	.3
		do	-------	-------	1934	do	688,579	1,048,769	1.52	12,355	20,815	1.68	1.8	2.0
		do	-------	-------	1935[1]	do	738,725	880,266	1.19	1,500	1,798	1.20	.2	.2
1685	Ammonium sulphate for fertilizers.	$5.60 ton	13.8	-------	1929	Ton	19,052	773,356	40.59	-------	-------	-------	-------	-------
		Free	-------	-------	1931	do	114,285	3,196,367	27.97	-------	-------	-------	-------	-------
		do	-------	-------	1932	do	307,311	5,410,160	17.60	446	6,253	14.02	.1	.1
		do	-------	-------	1933	do	351,254	6,179,256	17.59	13,453	207,037	15.39	3.8	3.4
		do	-------	-------	1934	do	185,301	3,656,487	19.73	832	20,761	24.95	.4	.6
		do	-------	-------	1935[1]	do	52,832	1,190,441	22.53	3,426	97,824	28.55	6.5	8.2

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ed	do			1929	Pound				(2)	(2)	(2)	(2)	(2)
	do			1931	do	[1]136,608,257	[1]3,606,037	[1].026					
	do			1932	do	19,182,095	428,424	.022					
	do			1933	do	42,630,809	817,758	.019	4,699,530	101,456	.022	11.0	12.4
	do			1934	do	22,326,538	507,513	.023	66,615	1,498	.022	.3	.3
	do			1935 [1]	do	134,242,644	3,158,415	.024	3,394,631	120,404	.035	2.5	3.8
	do			1929	do	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
	do			1931	do								
	do			1932	do								
	do			1933	do	789,170	10,757	.014	589,801	8,226	.014	74.7	76.5
	do			1934	do	2,181,378	48,169	.022	2,181,378	48,169	.022	100.0	100.0
	do			1935 [1]	do	2,674,566	55,085	.021	2,226,200	45,622	.020	83.2	82.8
	do			1929	do	5,846,723	153,207	.026	4,029,474	107,166	.027	68.9	69.9
	do			1931	do	3,595,689	63,526	.018	2,174,404	36,955	.017	60.5	58.2
	do			1932	do	6,374,852	85,206	.013	4,801,767	63,006	.013	75.3	73.9
	do			1933	do	4,538,464	59,147	.013	1,989,458	22,336	.011	43.8	37.5
	do			1934	do	12,981,449	175,744	.014	10,380,094	137,290	.013	80.0	78.1
	do			1935 [1]	do	78,558,447	936,804	.012	68,629,324	809,279	.012	87.4	86.4
	do			1929	do	5,574,319	637,962	.014	3,380,934	384,714	.114	60.7	60.3
	do			1931	do	13,285,492	729,294	.055	7,172,800	396,080	.055	54.0	54.3
	do			1932	do	16,525,139	553,599	.034	7,911,928	280,874	.036	47.9	50.7
	do			1933	do	22,775,958	1,086,046	.048	5,312,590	183,411	.035	23.3	16.9
	do			1934	do	25,164,203	1,612,696	.064	8,376,976	486,452	.058	33.3	30.2
	do			1935 [1]	do	62,423,760	3,780,124	.061	26,871,221	1,574,202	.059	43.0	41.6

[1] months.

[2] Perilla seed and sesame seed reported under single classification. The combined imports from all countries were 18,339,874 pounds, valued at $777,086, and from Kwantung 3,609,219 pounds, valued at $152,447.

Sources: Statistics of imports for the year 1934 were taken from Foreign Commerce and Navigation of the United States. Statistics of imports for other years were compiled from monthly reports (in code) supplied by the Bureau of Foreign and Domestic Commerce.

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